COMPOSITE SCHEDULE OF RATES
BALOCHISTAN

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GENERAL CONDITIONS

1. The work contained in this Schedule of Rates shall be carried out in accordance with the specifications given briefly for each item and the applicable provisions of the Technical Specifications (Volume-III).

2. The rates entered against all items in the Schedule of Rates those referred in contract as the basic rates which cover the cost all materials, transportation to site of work, labour, equipment, tools, plants, supervision charges, all Government levies, imports, octroi charges, overheads, profits and incidental cost thereto required for the satisfactory completion of the work. Charges for testing for the Public Health Engineering and Electrical Works are also included in this schedule.

3. Unless otherwise stipulated, measurements for payment for the work done shall conform to the specifications for execution of works (Volume-III).

4. For certain items of the work floor-wise rates have been emoted in this schedule. For this purpose, the rates for the basement shall be applied to any works below the foundation up to the top of roof of basement. Rates for the ground floor include the cost of all works from the top of basement root up to top of ground floor roof and so on. Parapet, water tank and stair wall etc. shall be considered as part of the floor above which these are constructed.

5. If a discrepancy is found between various documents, the older of precedence given below shall govern to determine the scope of the contracted work forming part of the contract based on this schedule:

   Schedule of Quantities
   Technical Specification
   Special Conditions of the Agreement
   Conditions of Contract
   Drawings

6. The unit rates of plant, materials and labor given in this schedule are indicative and shall not form basis for a claim by the Contractor lot the works lot out percentage above or below the Composite Rates for various items.

7. Nominal conversion figures from System International to System Imperial have been given as complete switch over has not yet been achieved

ABBREVIATIONS USED

System Imperial		System International	
Running Foot	R.ft.	Millimeter	mm
Square Foot	Sq.ft.	Centimeter	cm
Cubic Foot	Cu.ft.	Running Meter	RM
Pound	Lb	Square Meter	Sq.m.
Ounce	Oz	Cubic Meter	Cu.m.
Pound per Square inch	Psi	Kilogram	Kg
Gross	Grs	Newton per Millimeter Square	N/mm^2
Maund	Mnd	Hundred	Hund
Dozen	Dz		

CONVERSION FACTORS

TO CONVERT	INTO	MULTIPLY BY
AREA		
Square Inch	Square Millimeter	645.16
Square Millimeter	Square Inch	0.0015
Square Foot	Square Meter	0.0929
Square Meter	Square Foot	10.7639
Square Yard	Square Meter	0.8361
Square Meter	Square Yard	1.1960
Acre	Square Meter	4046.8564
Acre	Hectare	0.4047
Hectare	Acre	2.4710
Hectare	Square Meter	10000
Square Mile	Square Kilometer	2.5899
Square Kilometer	Square Mile	0.3861
Square Mile	Hectare	258.999
Hectare	Square Mile	0.00386
CAPACITY, VOLUME AND MODULUS OF SECTION		
Pint (UK)	Liter	0.5683
Gallon (Imperial)	Liter	4.5461
Cubic Foot	Liter	28.3168
Cubic Meter	Liter	1000
Liter	Cubic Foot	0.0353
Cubic Inch	Millimeter	16.3871
Fluid Ounce	Millimeter	28.413
Liter	Gallon (Imperial)	0.2199
Cubic Inch	Cubic millimeter	16387.1
Cubic Foot	Cubic Meter	0.0283
Cubic Meter	Cubic Foot	35.3147
Cubic Yard	Cubic Meter	0.7645
Cubic Meter	Cubic Yard	1.3080
Acre Foot	Hectare Meter	0.1233

CONVERSION FACTORS

TO CONVERT	INTO	MULTIPLY BY
VELOCITY AND SPEED		
Foot per Second	Meter per Second	0.3048
Foot per Minute	Meter per Second	0.0051
Foot per Second	Kilometer per Hour	1.0973
Kilometer per Hour	Foot per Second	0.9113
Mile per Hour	Meter per Second	0.4470
Kilometer per Hour	Mile per Hour	0.6214
Mile per Hour	Kilometer per Hour	1.6093
FORCE		
Kilogram Force	Newton	0.8066
Pound Force	Newton	4.4482
Ton Force	Kilo Newton	9.9640
Newton	Pound Force	0.2248
Kilo Newton	Ton Force	0.1004
FORCE PER UNIT LENGTH		
Pound force per foot	Newton force per meter	14.5939
PRESSURE, STRESS AND MODULUS OF ELASTICITY (1PA=1N/m^2)		
Pound Force per square foot	Pascals	47.8803
Pound force per square inch	Kilo Pascals	6.8948
Ton force per square inch	Kilo Pascals	107.252
Kilo Pascals	Pound force per square foot	20.8354
Ton force per square inch	Mega Pascals	15.4443
Mega Pascal	Pound force per square inch	145.038
MASS PER UNIT LENGTH		
Pound per foot	Kilogram per meter	1.4882
Kilogram per meter	Pound per foot	0.6720
Ton per mile	Tonne per kilometer	0.6313

CONVERSION FACTORS

TO CONVERT	INTO	MULTIPLY BY
MASS PER UNIT AREA		
Ton per square mile	Kilogram per square kilometer	392.298
Pound per square foot	Kilogram per square meter	4.8824
Kilogram per square meter	Pound per square foot	0.2048
MASS PER UNIT VOLUME		
Pound per cubic foot	Kilogram per cubic meter	16.0185
Pound per cubic foot	Gram per liter	16.0185
Kilogram per cubic meter	Pound per cubic foot	0.06243
Grams per liter	Pound per cubic foot	0.06243
VOLUME RATE OF FLOW		
Cubic foot per second	Cubic meter per second	0.02832
Cubic foot per second	Liter per second	28.3168
Gallon per minute	Liter per second	0.0757
Cubic foot per thousand acres	Liter per hectare	0.0670
Cubic foot per thousand acres	Cubic meter per square kilometer	0.0070
FUEL COMSUMPTION		
Gallon per mile	Liter per kilometer	2.825
Mile per gallon	Kilometer per liter	0.354
MOVEMENT OF FORCE TORQUE		
Pound force foot	Newton meter	1.3558
Pound force inch	Newton meter	0.1130
Ton force foot	Kilonewton meter	3.0370
Ton force inch	Kilonewton meter	0.2531

CONVERSION FACTORS

TO CONVERT	INTO	MULTIPLY BY
SECOND MOMENT OF AREA		
Inch	Millimeter	25.4
PLANE ANGLE		
Degree	Radian	0.0174
WORK, ENERGY, POWER (1J=1Ws)		
Kilowatt per hour	Kilo Joule	3600
Foot pound force	Joule	1.3558
Horse power	Kilowatt	0.7457
Horse power	Kilogram force meter per second	76.0402

For exact values, please consult Standard Hand Books

SECTION – 1

CARRIAGE

1. CARRIAGE OF MATERIALS INCLUDING LOADING, UNLOADING AND STACKING AT SITE

2. THE TERM “KM” WHENEVER USED IS TO MEAN STATUTE KILOMETER

3. THE RATES FOR CARRIAGE BY BOAT OR STREAMER SHALL BE THE SAME BY ANY OTHER MECHANICAL MEANS ON LOAD

4. CARRIAGE ITEM RATES CANNOT BE USED WITHOUT PRIOR APPROVAL FROM THE COMPETENT AUTHORITY THAT IS PDWP/DAC

Sr. No.	Description	Unit	Rate (Rs.)	Ref. Tech. Specs.
1	Carriage of 100 Cft. (2.83 cu.m) of all materials like Clay, stone aggregate, spawl, kankar lime (unslaked), surkhi, etc. or 150 Cft. (4.25 cu.m) of timber, by truck or by any other means owned by the contractor. 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road			
a	Upto 1st Km	Per Km	637.49	
b	2nd Km	Per Km	636.55	
c	3rd Km	Per Km	461.79	
d	4th Km	Per Km	367.61	
e	5th Km	Per Km	308.16	
f	6th Km	Per Km	267.30	
g	7th Km	Per Km	237.15	
h	8th Km	Per Km	214.10	
i	9th Km	Per Km	195.49	
j	10th Km	Per Km	180.83	
k	11th Kms to 200Kms	Per Km	55.93	
l	Subsequent Km	Per Km	49.24	
2	Carriage of 5 tons of all material like coal, stone lime(unslaked), etc. B.G. Rail fastenings, points and crossing,Bridge Girders, pipes, sheets, Rail, M.S. bars, etc. etc.by truck or any other means owned by the contractor. 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road			
a	Upto 1st Km	Per Km	682.79	
b	2nd Km	Per Km	681.26	
c	3rd Km	Per Km	496.64	
d	4th Km	Per Km	396.98	
e	5th Km	Per Km	333.96	
f	6th Km	Per Km	290.56	
g	7th Km	Per Km	258.49	
h	8th Km	Per Km	207.70	
i	9th Km	Per Km	214.33	
j	10th Km	Per Km	198.44	
k	11th Kms to 200Kms	Per Km	65.36	
l	Subsequent Km	Per Km	58.30	
3	Carriage of 100 maunds of fuel wood by truck or any other means owned by the contractor: or any other means owned by the contractor: 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road			
a	Upto 1st Km	Per Km	217.05	
b	2nd Km	Per Km	214.30	
c	3rd Km	Per Km	166.70	
d	4th Km	Per Km	140.26	
e	5th Km	Per Km	123.10	
f	6th Km	Per Km	110.93	
g	7th Km	Per Km	101.74	
h	8th Km	Per Km	94.52	
i	9th Km	Per Km	88.65	
j	10th Km	Per Km	83.79	
k	11th to 200 Kms	Per Km	44.49	
l	Subsequent Km	Per Km	42.73	
4	Carriage of 1000 Nos. bricks 10"x5"x3" (250x125x75 mm) or 1000 Nos. tiles 12"x6"x2" (300x150x50 mm) by truck or any other means owned by the contractor :- 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road			
a	Upto 1st Km	Per Km	1041.71	
b	2nd Km	Per Km	617.12	
c	3rd Km	Per Km	442.51	

Sr. No.	Description	Unit	Rate (Rs.)	Ref. Tech. Specs.
d	4th Km	Per Km	349.06	
e	5th Km	Per Km	290.46	
f	6th Km	Per Km	250.49	
g	7th Km	Per Km	221.18	
h	8th Km	Per Km	198.94	
i	9th Km	Per Km	181.27	
j	10th Km	Per Km	167.07	
k	11th & subsequent Kms	Per Km	154.21	
5	Carriage of 100 cft. (2.83 cu.m) of all material like stone, aggregate, spawl, kankar lime(unslaked), surkhi, etc. or 150 cft. (4.25 cu.m) of timber, by means of material trolly 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road			
a	Upto 1st Km	Per Km	989.45	
b	2nd Km	Per Km	601.50	
c	3rd Km	Per Km	436.67	
d	4th Km	Per Km	348.23	
e	5th Km	Per Km	292.63	
f	6th Km	Per Km	254.60	
g	7th Km	Per Km	226.65	
h	8th Km	Per Km	205.37	
i	9th Km	Per Km	188.45	
j	10th Km	Per Km	174.82	
k	11th Kms to 200Kms	Per Km	59.62	
l	Subsequent Km	Per Km	53.28	
6	Carriage of 5 tons of all material like coal, stone lime (unslaked), etc. B.G. Rail fastening, points and crossing, Bridge girders, pipes, sheets, Rail, M.S. bars, etc. etc. by means of material trolly. 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road			
a	Upto 1st Km	Per Km	1035.93	
b	2nd Km	Per Km	636.94	
c	3rd Km	Per Km	464.84	
d	4th Km	Per Km	372.40	
e	5th Km	Per Km	314.22	
f	6th Km	Per Km	274.37	
g	7th Km	Per Km	245.05	
h	8th Km	Per Km	222.71	
i	9th Km	Per Km	204.93	
j	10th Km	Per Km	190.58	
k	11th Kms to 200Kms	Per Km	69.59	
l	Subsequent Km	Per Km	62.97	
7	Carriage of 100 maunds of fuel wood, by means of material trolly. 25 % Extra to be paid for hilly area			
a	Upto 1st Km	Per Km	1041.71	
b	2nd Km	Per Km	617.12	
c	3rd Km	Per Km	442.51	
d	4th Km	Per Km	349.06	
e	5th Km	Per Km	290.46	
f	6th Km	Per Km	250.49	
g	7th Km	Per Km	221.18	
h	8th Km	Per Km	198.94	
i	9th Km	Per Km	181.27	
j	10th Km	Per Km	167.07	
k	11th & subsequent Kms	Per Km	46.66	
8	Carriage of 1000 Nos. tiles 12"x6"x2" (300x150x50 mm), by means of material trolly. 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road			
a	Upto 1st Km	Per Km	1054.88	
b	2nd Km	Per Km	630.18	

Sr. No.	Description	Unit	Rate (Rs.)	Ref. Tech. Specs.
c	3rd Km	Per Km	453.71	
d	4th Km	Per Km	359.19	
e	5th Km	Per Km	299.87	
f	6th Km	Per Km	259.37	
g	7th Km	Per Km	229.65	
h	8th Km	Per Km	207.07	
i	9th Km	Per Km	189.13	
j	10th Km	Per Km	174.71	
k	11th & subsequent Kms	Per Km	52.49	
9	Carriage of 1000 No. bricks, 9"x4½"x3"(225x113x75 mm) or 8"x4"x4" (200x100x100mm) (nominal) 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road			
a	Upto 1st Km	Per Km	1041.71	
b	2nd Km	Per Km	617.12	
c	3rd Km	Per Km	442.51	
d	4th Km	Per Km	349.06	
e	5th Km	Per Km	290.46	
f	6th Km	Per Km	250.49	
g	7th Km	Per Km	221.18	
h	8th Km	Per Km	198.94	
i	9th Km	Per Km	181.27	
j	10th Km	Per Km	167.07	
k	11th & subsequent Kms	Per Km	46.66	
10	Carriage of 1000 No. tiles 9"x4½"x1½" (225x113x38 mm). 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road			
a	Upto 1st Km	Per Km	520.78	
b	2nd Km	Per Km	308.52	
c	3rd Km	Per Km	221.22	
d	4th Km	Per Km	174.50	
e	5th Km	Per Km	145.21	
f	6th Km	Per Km	125.23	
g	7th Km	Per Km	110.57	
h	8th Km	Per Km	99.45	
i	9th Km	Per Km	90.62	
j	10th Km	Per Km	83.52	
k	11th & subsequent Kms	Per Km	23.33	
11	Carriage of 100 bags of cement each bag weighing Cwt. (50 Kg) by 10 Wheeler trailer. 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road.			
a	Upto 1st Km	Per Km	958.11	
b	2nd Km	Per Km	946.37	
c	3rd Km	Per Km	719.72	
d	4th Km	Per Km	594.28	
e	5th Km	Per Km	513.06	
f	6th Km	Per Km	455.69	
g	7th Km	Per Km	412.44	
h	8th Km	Per Km	378.59	
i	9th Km	Per Km	351.09	
j	10th Km	Per Km	328.38	
k	11th & subsequent Kms	Per Km	135.72	
12	Carriage of 100 Nos. empty cement bags including bundling. 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road.			
a	Upto 1st Km	Per Km	87.19	
b	2nd Km	Per Km	49.01	
c	3rd Km	Per Km	34.21	
d	4th Km & subsequent Kms	Per Km	26.34	

Sr. No.	Description	Unit	Rate (Rs.)	Ref. Tech. Specs.
13	Carriage of 100 (2.83 cu.m) cft. of Sarkanda or pilchi, frash or brushwood, by boat or road :- 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road.			
a	Upto 1st Km	Per Km	989.45	
b	2nd Km	Per Km	601.50	
c	3rd Km	Per Km	436.67	
d	4th Km	Per Km	348.23	
e	5th Km	Per Km	292.63	
f	6th Km	Per Km	254.60	
g	7th Km	Per Km	226.65	
h	8th Km	Per Km	205.37	
i	9th Km	Per Km	188.45	
j	10th Km	Per Km	174.82	
k	11th Km & subsequent	Per Km	59.62	
14-a	Carriage of light machinery weighing upto 3 tonne upto 1000 ft. (300 metre) Exeeceding 1000 to 5000 ft (300 to 1500 metre) 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road.			
i	Upto 1st Km	Per Km	702.36	
ii	2nd Km	Per Km	701.72	
iii	3rd Km	Per Km	507.24	
iv	4th Km	Per Km	402.56	
v	5th Km	Per Km	336.55	
vi	6th Km	Per Km	291.25	
vii	7th Km	Per Km	257.85	
viii	8th Km	Per Km	232.36	
ix	9th Km	Per Km	212.03	
x	10th Km	Per Km	195.60	
xi	11th Km & subsequent	Per Km	182.30	
14-b	Carriage of Heavy machinery weighing more than 3 tonne using trailer including loading and unloading cost. 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road.			
i	Upto 1st Km	Per Km	2713.20	
ii	2nd Km	Per Km	2704.96	
iii	3rd Km	Per Km	1963.04	
iv	4th Km	Per Km	1561.88	
v	5th Km	Per Km	1307.80	
vi	6th Km	Per Km	1132.57	
vii	7th Km	Per Km	1002.89	
viii	8th Km	Per Km	903.47	
ix	9th Km	Per Km	823.92	
x	10th Km	Per Km	759.38	
xi	11th Km & subsequent	Per Km	191.91	
15	Cooly load for distance:-			
a	Upto 1000 ft. (300 metre)	Per Km	472.50	
b	Exceeding 1000 to 3000 ft. (300 to 900metre)	Per Km	393.75	
c	Upto 1st Km	Per Km	337.50	
d	2nd Km	Per Km	295.31	
e	3rd Km & subsequent	Per Km	236.25	
16	Carriage of small consignments weighing upto 5 maunds (job rates)			
a	Carriage of consignments odd jobs.			
i	Donkey load for distance upto 500 feet.	Per Km	104.28	
ii	Upto 1000 feet	Per Km	69.49	
iii	Upto ½ Mile/ 0.8 Km	Per Km	45.05	
iv	Upto one Mile/ 1.6 Km	Per Km	34.87	
v	Upto three Miles/ 4.8 Km	Per Km	27.46	
vi	Exceeding 3 Miles	Per Km	23.46	
b	Cart load for a distance :-			

Sr. No.	Description	Unit	Rate (Rs.)	Ref. Tech. Specs.
i	upto 4 Miles/ 6.4 Km	Per Km	24.48	
ii	Exceeding 4 Miles(6.4 Km) to10 Miles(16 Km)	Per Km	23.46	
17	Hire charges of:- without fuel and driver			
a	truck (10 Ton Capacity)	Per Day	10000.00	
b	tractor with trolly	Per Day	6000.00	
c	tractor without trolly	Per Day	1496.00	
18	Carriage of bitumen, tar or other lubricants, in drums:			
a	Upto 1st Km	ton	169.20	
b	2nd Km	ton	169.04	
c	3rd Km	ton	122.19	
d	4th Km	ton	96.98	
e	5th Km	ton	81.07	
f	6th Km	ton	70.16	
g	7th Km	ton	62.12	
h	8th Km	ton	55.97	
i	9th Km	ton	51.08	
j	10th Km	ton	47.12	
k	11th Km & subsequent	ton	12.05	
19	Carriage of Cement Concrete pipes BSS Class 'B" with comet joint and rubber ring, including loading, unloading and stacking (rate per 100 Rft. (30 m pipes):- 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road.			
a	3" (75 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	101.03	
ii	2nd Km	Per Km	100.79	
iii	3rd Km	Per Km	73.52	
iv	4th Km	Per Km	58.80	
v	5th Km	Per Km	49.49	
vi	6th Km	Per Km	43.07	
vii	7th Km	Per Km	38.33	
viii	8th Km	Per Km	34.70	
ix	9th Km	Per Km	31.80	
x	10th Km	Per Km	29.45	
xi	11th Km & subsequent	Per Km	9.77	
b	4" (100 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	125.27	
ii	2nd Km	Per Km	124.98	
iii	3rd Km	Per Km	91.16	
iv	4th Km	Per Km	72.91	
v	5th Km	Per Km	61.36	
vi	6th Km	Per Km	53.41	
vii	7th Km	Per Km	47.53	
viii	8th Km	Per Km	43.03	
ix	9th Km	Per Km	39.43	
x	10th Km	Per Km	36.52	
xi	11th Km & subsequent	Per Km	12.12	
c	6" (150 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	153.91	
ii	2nd Km	Per Km	153.55	
iii	3rd Km	Per Km	112.00	
iv	4th Km	Per Km	89.57	
v	5th Km	Per Km	75.39	
vi	6th Km	Per Km	65.62	
vii	7th Km	Per Km	58.39	
viii	8th Km	Per Km	52.87	
ix	9th Km	Per Km	48.45	
x	10th Km	Per Km	44.87	
xi	11th Km & subsequent	Per Km	14.89	
d	9" (225 mm) i/d pipes:			
i	Upto 1st Km	Per Km	270.69	

Sr. No.	Description	Unit	Rate (Rs.)	Ref. Tech. Specs.
ii	2nd Km	Per Km	270.06	
iii	3rd Km	Per Km	196.98	
iv	4th Km	Per Km	157.54	
v	5th Km	Per Km	132.59	
vi	6th Km	Per Km	115.40	
vii	7th Km	Per Km	102.70	
viii	8th Km	Per Km	92.98	
ix	9th Km	Per Km	85.21	
x	10th Km	Per Km	78.91	
xi	11th Km & subsequent	Per Km	26.18	
e	12" (300 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	270.69	
ii	2nd Km	Per Km	270.06	
iii	3rd Km	Per Km	196.98	
iv	4th Km	Per Km	157.54	
v	5th Km	Per Km	132.59	
vi	6th Km	Per Km	115.40	
vii	7th Km	Per Km	102.70	
viii	8th Km	Per Km	92.98	
ix	9th Km	Per Km	85.21	
x	10th Km	Per Km	78.91	
xi	11th Km & subsequent	Per Km	26.18	
f	16" (400 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	569.66	
ii	2nd Km	Per Km	568.33	
iii	3rd Km	Per Km	414.55	
iv	4th Km	Per Km	331.54	
v	5th Km	Per Km	279.03	
vi	6th Km	Per Km	242.87	
vii	7th Km	Per Km	216.14	
viii	8th Km	Per Km	195.67	
ix	9th Km	Per Km	179.31	
x	10th Km	Per Km	166.06	
xi	11th Km & subsequent	Per Km	55.10	
g	18" (450 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	828.22	
ii	2nd Km	Per Km	826.28	
iii	3rd Km	Per Km	602.70	
iv	4th Km	Per Km	482.02	
v	5th Km	Per Km	405.68	
vi	6th Km	Per Km	353.10	
vii	7th Km	Per Km	314.24	
viii	8th Km	Per Km	284.48	
ix	9th Km	Per Km	260.70	
x	10th Km	Per Km	241.43	
xi	11th Km & subsequent	Per Km	80.11	
h	20" (500 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	909.31	
ii	2nd Km	Per Km	907.18	
iii	3rd Km	Per Km	661.71	
iv	4th Km	Per Km	529.22	
v	5th Km	Per Km	445.40	
vi	6th Km	Per Km	387.67	
vii	7th Km	Per Km	345.00	
viii	8th Km	Per Km	312.34	
ix	9th Km	Per Km	286.22	
x	10th Km	Per Km	265.07	
xi	11th Km & subsequent Kms	Per Km	87.95	
i	24" (600 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	1212.14	

Sr. No.	Description	Unit	Rate (Rs.)	Ref. Tech. Specs.
ii	2nd Km	Per Km	1209.30	
iii	3rd Km	Per Km	882.08	
iv	4th Km	Per Km	705.46	
v	5th Km	Per Km	593.73	
vi	6th Km	Per Km	516.77	
vii	7th Km	Per Km	459.90	
viii	8th Km	Per Km	416.36	
ix	9th Km	Per Km	381.55	
x	10th Km	Per Km	353.35	
xi	11th Km & subsequent Kms	Per Km	117.25	
j	30" (760 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	864.61	
ii	2nd Km	Per Km	861.98	
iii	3rd Km	Per Km	625.56	
iv	4th Km	Per Km	497.72	
v	5th Km	Per Km	416.75	
vi	6th Km	Per Km	360.91	
vii	7th Km	Per Km	319.59	
viii	8th Km	Per Km	287.91	
ix	9th Km	Per Km	262.56	
x	10th Km	Per Km	241.99	
xi	11th Km & subsequent Kms	Per Km	61.16	
k	36" i/d pipes:-			
i	Upto 1st Km	Per Km	969.34	
ii	2nd Km	Per Km	966.40	
iii	3rd Km	Per Km	701.33	
iv	4th Km	Per Km	558.01	
v	5th Km	Per Km	467.24	
vi	6th Km	Per Km	404.63	
vii	7th Km	Per Km	358.30	
viii	8th Km	Per Km	322.78	
ix	9th Km	Per Km	294.36	
x	10th Km	Per Km	271.30	
xi	11th Km & subsequent Kms	Per Km	68.56	
20	Carriage of PVC, UPVC, PPRC or HDPE pipes B.S.S. all Classes including loading, unloading and stacking (Rate per 1000 ft.) (300 metre) :- 25 % Extra to be paid for hilly area, 25% Extra for Hard Area, 20% more for Kucha Road, 15% more for desert road.			
a	3" (75 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	72.18	
ii	2nd Km	Per Km	71.71	
iii	3rd Km	Per Km	53.66	
iv	4th Km	Per Km	43.82	
v	5th Km	Per Km	37.54	
vi	6th Km	Per Km	33.17	
vii	7th Km	Per Km	29.91	
viii	8th Km	Per Km	27.39	
ix	9th Km	Per Km	25.37	
x	10th Km	Per Km	23.71	
xi	11th Km & subsequent Kms	Per Km	10.04	
b	4" (100 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	112.78	
ii	2nd Km	Per Km	112.06	
iii	3rd Km	Per Km	83.85	
iv	4th Km	Per Km	68.47	
v	5th Km	Per Km	58.66	
vi	6th Km	Per Km	51.83	
vii	7th Km	Per Km	46.73	
viii	8th Km	Per Km	42.80	
ix	9th Km	Per Km	39.64	

Sr. No.	Description	Unit	Rate (Rs.)	Ref. Tech. Specs.
x	10th Km	Per Km	37.05	
xi	11th Km & subsequent Kms	Per Km	15.69	
c	5" (125 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	176.22	
ii	2nd Km	Per Km	175.10	
iii	3rd Km	Per Km	131.02	
iv	4th Km	Per Km	106.99	
v	5th Km	Per Km	91.65	
vi	6th Km	Per Km	80.98	
vii	7th Km	Per Km	73.03	
viii	8th Km	Per Km	66.88	
ix	9th Km	Per Km	61.94	
x	10th Km	Per Km	57.90	
xi	11th Km & subsequent Kms	Per Km	24.52	
d	6" (150 mm) i/d pipes:			
i	Upto 1st Km	Per Km	253.81	
ii	2nd Km	Per Km	252.19	
iii	3rd Km	Per Km	188.71	
iv	4th Km	Per Km	154.10	
v	5th Km	Per Km	132.01	
vi	6th Km	Per Km	116.63	
vii	7th Km	Per Km	105.18	
viii	8th Km	Per Km	96.33	
ix	9th Km	Per Km	89.20	
x	10th Km	Per Km	83.38	
xi	11th Km & subsequent Kms	Per Km	35.31	
e	8" (200 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	451.29	
ii	2nd Km	Per Km	448.41	
iii	3rd Km	Per Km	335.54	
iv	4th Km	Per Km	274.00	
v	5th Km	Per Km	234.72	
vi	6th Km	Per Km	207.38	
vii	7th Km	Per Km	187.01	
viii	8th Km	Per Km	171.28	
ix	9th Km	Per Km	158.61	
x	10th Km	Per Km	148.26	
xi	11th Km & subsequent Kms	Per Km	62.79	
f	10" (250 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	705.32	
ii	2nd Km	Per Km	700.82	
iii	3rd Km	Per Km	524.42	
iv	4th Km	Per Km	428.24	
v	5th Km	Per Km	366.84	
vi	6th Km	Per Km	324.12	
vii	7th Km	Per Km	292.29	
viii	8th Km	Per Km	267.70	
ix	9th Km	Per Km	247.89	
x	10th Km	Per Km	231.72	
xi	11th Km & subsequent Kms	Per Km	98.14	
g	12" (300 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	1015.53	
ii	2nd Km	Per Km	1009.05	
iii	3rd Km	Per Km	755.07	
iv	4th Km	Per Km	616.58	
v	5th Km	Per Km	528.18	
vi	6th Km	Per Km	466.67	
vii	7th Km	Per Km	420.84	
viii	8th Km	Per Km	385.43	
ix	9th Km	Per Km	356.92	

Sr. No.	Description	Unit	Rate (Rs.)	Ref. Tech. Specs.
x	10th Km	Per Km	333.64	
xi	11th Km & subsequent Kms	Per Km	141.30	
h	(315 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	1187.75	
ii	2nd Km	Per Km	1184.15	
iii	3rd Km	Per Km	859.36	
iv	4th Km	Per Km	683.74	
v	5th Km	Per Km	572.51	
vi	6th Km	Per Km	495.80	
vii	7th Km	Per Km	439.03	
viii	8th Km	Per Km	395.51	
ix	9th Km	Per Km	360.69	
x	10th Km	Per Km	332.43	
xi	11th Km & subsequent Kms	Per Km	84.01	
i	(400 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	1508.15	
ii	2nd Km	Per Km	1503.58	
iii	3rd Km	Per Km	1091.17	
iv	4th Km	Per Km	868.19	
v	5th Km	Per Km	726.95	
vi	6th Km	Per Km	629.55	
vii	7th Km	Per Km	557.46	
viii	8th Km	Per Km	502.20	
ix	9th Km	Per Km	457.98	
x	10th Km	Per Km	422.11	
xi	11th Km & subsequent Kms	Per Km	106.68	
j	(500 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	2424.06	
ii	2nd Km	Per Km	2416.70	
iii	3rd Km	Per Km	1753.84	
iv	4th Km	Per Km	1395.43	
v	5th Km	Per Km	1168.43	
vi	6th Km	Per Km	1011.87	
vii	7th Km	Per Km	896.01	
viii	8th Km	Per Km	807.19	
ix	9th Km	Per Km	736.11	
x	10th Km	Per Km	678.45	
xi	11th Km & subsequent Kms	Per Km	171.46	
k	(660 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	4751.01	
ii	2nd Km	Per Km	4736.59	
iii	3rd Km	Per Km	3437.42	
iv	4th Km	Per Km	2734.97	
v	5th Km	Per Km	2290.06	
vi	6th Km	Per Km	1983.21	
vii	7th Km	Per Km	1756.13	
viii	8th Km	Per Km	1582.04	
ix	9th Km	Per Km	1442.74	
x	10th Km	Per Km	1329.73	
xi	11th Km & subsequent Kms	Per Km	336.05	
l	(800 mm) i/d pipes:-			
i	Upto 1st Km	Per Km	7669.65	
ii	2nd Km	Per Km	7646.36	
iii	3rd Km	Per Km	5549.09	
iv	4th Km	Per Km	4415.11	
v	5th Km	Per Km	3696.88	
vi	6th Km	Per Km	3201.53	
vii	7th Km	Per Km	2834.95	
viii	8th Km	Per Km	2553.91	
ix	9th Km	Per Km	2329.04	

Sr. No.	Description	Unit	Rate (Rs.)	Ref. Tech. Specs.
x	10th Km	Per Km	2146.61	
xi	11th Km & subsequent Kms	Per Km	542.49	

SECTION – 2

LOADING, UN-LOADING AND STACKING

1. THE RATES FOR LOADING FROM MOBILE TRUCKS TROLLIES AND BOATS WILL BE THE SAME AS FOR RAILWAY WAGONS

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
2-1	Loading or unloading into or from mobile trucks, coarse aggregate, sand, stone/ brick ballast, surkhi, ashes, kankar, brick/stone bats, coal or lime etc. lead upto 100 ft (30 m)	Cu.m.	587.40	587.40	
2-2	Loading or unloading bricks or tiles into or from mobile trucks properly laid and stacked lead upto 100 ft (30 m)	1000 Nos.	1708.80	1708.80	
2-3	Loading or unloading into or from mobile trucks cement in bags (inside or outside the godown) and stacking lead upto 100 ft (30 m)	100 Nos.	1708.80	1708.80	
2-4	Loading or unloading into or from mobile trucks empty cement bags (inside or outside the godown) and stacking lead upto 100 ft (30 m)	100 Nos.	164.47	164.47	
2-5	Loading or unloading into or from mobile trucks (inside or outside the godown) and stacking, white lime in bags lead upto 100 ft (30 m)	% Kg.	32.04	32.04	
2-6	Loading or unloading into or from mobile trucks structural steel, R.S joists etc. lead upto 100 ft (30 m)	Tonne	341.76	341.76	
2-7	Loading or unloading 205 litre drums fuel into or from mobile trucks, lead upto 100 ft (30 m)	Each	102.53	102.53	
2-8	Loading or unloading packages of sorts weighing upto 50 kgs.	Each	51.26	51.26	
2-9	Loading or unloading timber logs or timber for shuttering, into or from mobile trucks including stacking lead upto 100 ft (30 m)	Tonne	472.06	472.06	
2-10	Loading or unloading bhoosa into or from mobile trucks lead upto 150 ft. (45 m)	% Kg.	128.16	128.16	
2-11	Loading or unloading timber scrap or wooden plugs into or from mobile trucks including stacking and lead upto 100 ft (30 m)	Tonne	754.01	754.01	
2-12	Loading or unloading pitching stone or spawl from mobile trucks including clearing	Cu. m.	179.42	179.42	
2-13	Loading or unloading building stone including clearing unloading oils.	Cu. m.	232.82	232.82	
2-14	Unloading Oils				
2-14-a	Crude oil (to be pumped from tanker into tank)	1000 Litre	450.70	450.70	
2-14-b	Crude oil (drained by gravity)	1000 Litre	450.70	450.70	
2-14-c	Fuel oil into empty drums including stacking upto 100 ft (30 m)	Tonne	670.70	670.70	
2-14-d	Petrol (4.5 litre tin) Kerosine (18 litre tin)	100 Nos.	860.81	860.81	
2-14-e	Kerosine (18 litre tin)	100 Nos.	1708.80	1708.80	
2-15	Removing and stacking lead upto 100 ft (30 m)				
2-15-a	Stone, spawl, brick bats, shingle, sand, lime, surkhi, ashes, kankar and coal etc.	Cu. m.	241.37	241.37	
2-15-b	Bricks	% Nos.	1822.01	1822.01	
2-15-c	Rails, girders, pipes, cement etc.	Tonne	335.35	335.35	
2-15-d	Bailey bridges & wooden structural members	% Nos.	747.60	747.60	
2-16	Loading into mobile trucks girders, rails, permanent way material, iron work. pipes etc including lead upto 100 ft (30 m) and stacking	Tonne	754.01	754.01	
2-17	Unloading from mobile trucks girders, permanent way material, iron work, pipes, etc. lead upto 100 ft (30 m) but excluding stacking.	Tonne	431.47	431.47	
2-18	Loading or unloading bitumen, asphalt or tar in drums, into or from mobile trucks lead upto 100 ft (30 m)	Tonne	452.83	452.83	
2-19	Loading bailey bridge wooden structural members including stacking lead upto 100 ft (30m)	Cu. m.	587.40	587.40	
2-20	Unloading bailey bridge wooden structural members excluding stacking lead upto 100 ft (30m)	% Nos.	299.04	299.04	
2-21	Loading into mobile trucks, steel fabrication/bars including lead upto 100 ft (30m) and stacking inside trucks.	Tonne	1174.80	1174.80	
2-22	Unloading from mobile trucks, steel fabrication/bars including lead upto 100 ft (30m) and stacking	Tonne	587.40	587.40	

SECTION – 3

EARTH WORK

1. THE SOIL CLASSIFICATION WILL BE APPROVED BY THE SUPERINTENDING ENGINEER

2. NO DEDUCTION WILL BE MADE FOR RAMMED / COMPACTED FILL

3. DEDUCTION FOR SETTLEMENT FROM THE BANK MEASUREMENTS WHEN THE EARTHWORK INDONE BY DIFFERENT TYPE OF MACHINERY BE AS UNDER
   I. TRACTOR 6%
   II. BULLDOZER 4%
   III. SCRAPERS 3%

4. WHERE THE ABOVE EQUIPMENT IS DEPLOYED IN FLEET THE MINIMUM FACTOR SPECIFIED WILL BE APPLIED

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
3-1	Earth work excavation undressed, lead upto a single throw of kassi, phaorah, shovel.				
A)	Manual (Maximium Area 250 Sft)				
i)	In ashes, sand, soft soil or silt clearance.	Cu.m	181.56		
ii)	In ordinary soil	Cu.m	217.87		
iii)	In hard soil	Cu.m	373.80		
iv)	In shingle or gravel	Cu.m	747.60		
B)	Equiptment				
i)	In ashes, sand, soft soil or silt clearance.	Cu.m	143.34		
ii)	In ordinary soil	Cu.m	189.21		
iii)	In hard soil	Cu.m	229.34		
iv)	In shingle or gravel	Cu.m	344.02		
3-2	Earth work excavation undressed, lead upto 50 ft. (15m.)				
A)	Manual (Maximium Area 250 Sft)				
i)	In ashes, sand, soft soil or silt clearance.	Cu.m	264.86		
ii)	In ordinary soil	Cu.m	320.40		
iii)	In hard soil	Cu.m	448.56		
iv)	In shingle or gravel	Cu.m	907.80		
B)	Mechnical				
i)	In ashes, sand, soft soil or silt clearance.	Cu.m	197.73		
ii)	Ordinary soil	Cu.m	276.23		
iii)	Hard soil	Cu.m	338.12		
iv)	Shingle or gravel	Cu.m	474.55		
3-3	Bed clearance in ordinary soil and dressing slopes of drains to required section including removal of weeds, roots etc. and disposal of excavated material within 50 ft. (15m) lead.				
A)	Excavated material undressed	Cu.m	337.49		
B)	Excavated material dressed in specified manner.	Cu.m	665.72		
3-4	Borrow pit excavation depth upto 10 ft. (3 m) undressed lead upto 100 ft. (30m)				
A)	In ashes, sand, soft soil or silt clearance.	Cu.m	230.36		
B)	Ordinary soil	Cu.m	297.99		
C)	Hard soil	Cu.m	359.88		
D)	Shingle or gravel	Cu.m	518.06		
3-5	Earthwork for embankment lead upto 1000 M and compaction by mechanical means at optimum moisture content, dressing to designed section including laying, leveling and watering.				
A-	Sand				
i)	95% maximum modified AASHTO dry density	Cu.m	10.68	298.18	
ii)	90% maximum modified AASHTO dry density	Cu.m	10.68	286.05	
iii)	85% maximum modified AASHTO dry density	Cu.m	10.68	260.43	
B-	Ordinary soil				
i)	95% maximum modified AASHTO dry density	Cu.m	14.95	450.34	
ii)	90% maximum modified AASHTO dry density	Cu.m	14.95	415.46	
iii)	85% maximum modified AASHTO dry density	Cu.m	14.95	403.32	
C-	Hard soil				
i)	95% maximum modified AASHTO dry density	Cu.m	19.22	716.74	
ii)	90% maximum modified AASHTO dry density	Cu.m	19.22	588.33	
iii)	85% maximum modified AASHTO dry density	Cu.m	19.22	531.88	
D-	Shingle or gravel				
i)	95% maximum modified AASHTO dry density	Cu.m	19.22	834.22	
ii)	90% maximum modified AASHTO dry density	Cu.m	19.22	773.56	
iii)	85% maximum modified AASHTO dry density	Cu.m	19.22	712.89	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
3-6	Earthwork for embankment lead upto 100 ft. (30m) and compaction by Manual (Maximium Area 250 Sft) labour at optimum moisture content, dressing to designed section, laying, leveling and watering.				
A-	Sand	Cu.m	576.72		
B-	Ordinary soil	Cu.m	672.84		
C-	Hard soil	Cu.m	1025.28		
D-	Shingle or gravel	Cu.m	1399.08		
3-7	Earthwork excavation in open cutting upto 5ft. (1.5m) depth for storm water channels, drains in open area, roads, streets lanes and shoring to protect existing works, shuttering and timbering the trenches dressed to designed level and dimension, trimming from trenches, backfilling and disposal of surplus excavated material upto 50ft (15m) including dressing, excluding removal of surface water from drains.				
A-	In ashes, sand, soft soil or silt clearance.	Cu.m	42.36	351.40	
B-	Ordinary soil	Cu.m	44.50	453.57	
C-	Hard soil	Cu.m	46.63	549.99	
D-	Shingle or gravel	Cu.m	48.77	699.60	
3-8	Earthwork excavation in open cutting from 5ft. to 10 ft (1.5m to 3 m) depth for storm water channels, drains in open area, roads, streets lanes and shoring to protect existing works, shuttering and timbering the trenches dressed to designed level and dimension, trimming from trenches, backfilling and disposal of surplus excavated material upto 100 ft (30 m) including dressing, excluding removal of surface water from drains.				
A-	In ashes, sand, soft soil or silt clearance.	Cu.m	123.53	439.88	
B-	Ordinary soil	Cu.m	136.34	553.68	
C-	Hard soil	Cu.m	159.84	673.39	
D-	Shingle or gravel	Cu.m	191.88	855.59	
3-9	Excavation in shingle or gravel formation, undressed lead upto 100 ft. (30m)				
A-	Manual (Maximium Area 250 Sft)				
i)	Dry	Cu.m	674.98		
ii)	Wet	Cu.m	1061.59		
iii)	In flowing water	Cu.m	1352.09		
iv)	Under water including dewatering	Cu.m	1335.00	1771.80	
B-	Machinery				
i)	Dry	Cu.m	344.02		
ii)	Wet	Cu.m	458.69		
iii)	In flowing water	Cu.m	573.36		
iv)	Under water including dewatering	Cu.m	320.40	1338.43	
3-10	Earthwork excavation in irrigation channels drains etc. to designed section, grades and profiles excavated material disposed off and dressed within 50 ft (15m) lead.				
A-	Manual (Maximium Area 250 Sft)				
i)	In ashes, sand, soft soil or silt clearance.	Cu.m	337.49		
ii)	Ordinary soil	Cu.m	427.20		
iii)	Hard soil	Cu.m	551.09		
iv)	Shingle or gravel formation	Cu.m	886.44		
B-	Machinery				
i)	In ashes, sand, soft soil or silt clearance.	Cu.m	20.29	289.55	
ii)	Ordinary soil	Cu.m	26.27	377.37	
iii)	Hard soil	Cu.m	34.18	479.38	
iv)	Shingle or gravel formation	Cu.m	44.86	658.69	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
3-11	Excavation in rock dressed to designed section, grades and profiles, excavated material disposed of within 100 ft.(30 m) & lift upto 6.5 ft. (2m.)				
A)	Soft rock, slate, shale, work, with pick and crow bar.	Cu.m	149.52	666.96	
B)	Medium hard rock schist or laterite requiring occasional blasting	Cu.m	1497.34	1647.07	
3-12	Excavation in hard rock requiring blasting and disposal of excavated material (blasted material) upto 50 ft. (15m) lead, (including dressing and levelling to designated section).				
A)	Grade I	Cu.m	882.31	1058.77	
B)	Grade II	Cu.m	1058.77	1270.53	
C)	Grade III	Cu.m	1270.53	1524.64	
D)	Grade IV	Cu.m	1245.84	1744.18	
E)	Grade V	Cu.m	1370.42	1918.59	
F)	Grade VI	Cu.m	1466.35	2052.90	
3-13	Excavation in hard rock requiring blasting but blasting prohibited and disposal of excavated material within 50 ft. (15m) lead, (including dressing and levelling to designed section etc.).				
A)	Grade I	Cu.m	1140.86	1426.08	
B)	Grade II	Cu.m	1426.08	1782.60	
C)	Grade III	Cu.m	1782.60	2228.25	
D)	Grade IV	Cu.m	1676.42	2011.71	
E)	Grade V	Cu.m	1844.07	2212.88	
F)	Grade VI	Cu.m	2028.47	2434.17	
3-14	Rehandling of earthwork				
A)	Lead upto a single throw of Kassi, phaorah or shovel	Cu.m	149.52		
B)	Upto a lead of 50 ft. (15 m.)	Cu.m	213.60		
C)	Upto a lead of 100 ft. (30 m.)	Cu.m	277.68		
3-15	Rehandling of gravel work or excavated rock, lead upto 50 ft. (15m.)	Cu.m	482.74		
3-16	Filling, watering and compacting earth under floors in layers not exceeding 8 inchs in thickness.				
A)	With surplus earth from foundation etc.	Cu.m	177.40	296.69	
B)	With new earth excavated from outside, lead upto 100 ft. (30m) and lift upto 5 ft. (1.5m) including royality of Clay	Cu.m	140.32	360.83	
C)	With sand excavated from outside, lead upto 25 km including royality of sand, no additional lead shall be paid without prior approval of Engineer incharge.	Cu.m	23.50	1413.89	
3-17	Filling, watering and ramming earth under floors for every 50 ft. (15m) additional lead or part thereof (Maximum upto 1000 ft.) (300 m)				
A)	For earthwork soft, ordinary, hard and very hard	Cu.m	4.27		
B)	For gravel, shingle or rock	Cu.m	6.41		
3-18	Dressing and levelling of earthwork to designed section.				
A)	Ashes, sand, silt or soft soil	Cu.m	17.09		
B)	Ordinary or hard soil	Cu.m	29.90		
C)	Gravel work or soft rock not requiring blasting	Cu.m	72.62		
3-19	Dressing dowels of canal banks, marginal bunds and flood protection bunds.	R.M	12.82		
3-20	Dressing				
A)	Dressing slopes of banks or ground surface	Sqm	19.22		
B)	Dressing of earthwork by machinery or otherwise and left undressed	Sqm	34.18		
3-21	Excavation in foundation of buildings and bridges including layout, dressing, refilling around structures with excavated earth, watering & ramming lead upto 100 ft. (30m) & lift upto 5 ft. (1.5m)				
A-	Manual (Maximium Area 250 Sft)				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
i)	Sand, ashes or loose soil	Cu.m	435.74		
ii)	Ordinary soil	Cu.m	506.23		
iii)	Hard soil or soft murum	Cu.m	568.18		
iv)	Shingle or gravel	Cu.m	662.16		
B-	Mechnical				
i)	Sand	Cu.m	102.53	382.10	
ii)	Ordinary soil	Cu.m	136.70	513.74	
iii)	Hard soil	Cu.m	177.29	647.81	
iv)	Shingle or gravel formation	Cu.m	213.60	770.12	
3-22	Cutting hard rock such as granite, ballast, hard lime stone or sand stone etc. with chisels and hammers for small foundation.	Cu.m	3394.34	3919.86	
3-23	Extra for excavation requiring shoring.	Cu.m	67.13	95.99	
3-24	Manual (Maximium Area 250 Sft) Compaction of earthwork (soft, ordinary, or hard soil)				
A)	Mixing, moisturing earth to optimum moisture content in layers for compaction.	Cu.m	57.67		
B)	Compaction by rolling with animal driven roller/hand rammed.				
i)	Soft and sandy soil	Cu.m	275.37		
ii)	Ordinary soil	Cu.m	295.25		
iii)	Hard soil	Cu.m	319.10		
iv)	Shingle or gravel	Cu.m			
C)	Ramming earth work (all type of soil)	Cu.m	135.14		
D)	Ramming earth work behind retaining wall	Cu.m	135.14		
3-25	Compaction of earthwork in embankment to full depth and width by approved mechanical means in layer not exceeding 10 inches (230mm) in depth at optimum moisture content including watering by mechanical means.				
A)	95% maximum modified AASHTO dry density.	Cu.m	65.01	595.75	
B)	90% maximum modified AASHTO dry density.	Cu.m	65.01	493.15	
C)	85% maximum modified AASHTO dry density.	Cu.m	65.01	441.85	
3-26	Extra for wet earthwork (Supporting man's weight)	Cu.m	145.25		
3-27	Extra for slush or daldal including dewatering (Not supporting man's weight)	Cu.m	386.62		
3-28	Extra for pudding	Cu.m	301.18		
3-29	Earthwork on small rain water drains, along canal banks, roads and plantation drains dressed.	R.M.	44.86		
3-30	Filling and compacting soil, earth and boulders behind retaining walls (including excavation of soil and lead upto 50 ft. (15m)	Cu.m	433.61		
3-31	Survey				
A)	Dag belling 3" (75 mm.) deep	Km.	3780.72		
B)	Cross Sectional Survey for roads using Total Station or Differential GPS (GNSS)	Km.	36000.00		
3-32	Turfing slopes of banks or lawns with grass sods including ploughing, laying, setting and watering (Truf obtained from within a distance of 8km (5 miles) and maintained for 15 days).	Sqm	245.64		
3-33	Berm Cutting.				
A)	Lead upto a single throw of kassi, phaorah or shovel (without dressing)	Cu.m	217.87		
B)	Lead upto 50 ft. (15 m.), including dressing	Cu.m	433.61		
3-34	Berm trimming both sides of channels.				
A)	Upto 3 ft. (1.0 m) Channel depth	Cu.m	10551.84		
B)	Exceeding 3 ft. to 5 ft. (1.0 m to 1.5 m) Channel depth	Cu.m	10252.80		
C)	Exceeding 5 ft. to 8 ft. (1.5m to 2.5m) Channel depth	Cu.m	14097.60		
3-35	Ploughing and levelling borrow pits.				
A)	Upto 3 ft. (1 m) depth	Hectare	25548.60		
B)	Above 3 ft. (1 m) depth	Hectare	51097.20		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
3-36	Making boundary or service roads including dagbelling, levelling and dressing.				
A)	Unploughed land				
i)	From 10 ft. to 20 ft. (3 m. to 6 m.) wide	R.M.	85.44		
ii)	From 20 ft. to 40 ft. (6 m. to 12 m.) wide	R.M.	115.34		
B)	Ploughed Land				
i)	From 10 ft. to 20 ft. (3 m to 6 m) wide	R.M.	57.67		
ii)	From 20 ft. to 40 ft. (6 m. to 12 m.) wide	R.M.	76.90		
3-37	Earthwork by boats, including hire charges of boats.				
A)	Digging and loading into boats upto 50 ft. (15 m) lead	Cu.m	363.12		
B)	Carriage by boats upto 1000 ft. (300 m)	Cu.m	210.12		
C)	Extra for every additional 100 ft. (30m) or part thereof beyond 1000 ft. (300m)	Cu.m	12.36		
D)	Un-loading Carriage by boats upto 1000 ft. (300 m)	Cu.m	168.74		
3-38	Unloading earth from B.G. trucks and clearing 5 ft. (1.5 m) from rail	Cu.m	145.25		
3-39	Earthwork by tramway, digging and loading into trucks, upto 50 ft. (15m) lead	Cu.m	337.49		
3-40	Unloading earth from B.G. trucks and spreading upto 50 ft. (15m) from rail	Cu.m	217.87		
3-41	Supplying clean and screened river or pit sand within 500 ft. (150m)	Cu.m	1281.60		
3-42	Excavation in open cutting for sewers and manholes as shown in drawings, dressing to correct sections and dimensions according to templates and levels and removing surface water in all types of soil except rock (i) The rate includes back filling after laying of sewer, which is payable separately. (ii) The rate for close/open shuttering & timbering will be as per item No. 3-43 & 3-44 where actually used at site.				
A)	Upto 5 ft. (1.5 m) depth				
i)	In ashes, sand, soft soil or silt clearance.	Cu.m	6.41	149.75	
ii)	Ordinary soil	Cu.m	6.41	195.62	
iii)	Hard soil	Cu.m	10.68	297.36	
iv)	Shingle or gravel	Cu.m	17.09	447.11	
B)	Below 5 ft. to 10 ft. (1.5 m to 3.0 m) depth				
i)	In ashes, sand, soft soil or silt clearance.	Cu.m	6.41	195.62	
ii)	Ordinary soil	Cu.m	10.68	297.36	
iii)	Hard soil	Cu.m	17.09	447.11	
iv)	Shingle or gravel	Cu.m	21.36	594.72	
C)	Below 10 ft. to 15 ft. (3.0 m to 4.5 m) depth				
i)	In ashes, sand, soft soil or silt clearance.	Cu.m	8.54	237.89	
ii)	Ordinary soil	Cu.m	12.82	356.83	
iii)	Hard soil	Cu.m	19.22	535.25	
iv)	Shingle or gravel	Cu.m	25.63	713.66	
D)	Below 15 ft. to 20 ft. (4.5 m to 6.0 m) depth				
i)	In ashes, sand, soft soil or silt clearance.	Cu.m	10.68	297.36	
ii)	Ordinary soil	Cu.m	17.09	447.11	
iii)	Hard soil	Cu.m	19.22	535.25	
iv)	Shingle or gravel	Cu.m	25.63	713.66	
3-43	Providing and fixing close shuttering and timbering for excavation in open cutting for sewers and manholes as shown in drawings and removing of timbering after completion of job.				
A)	For depth upto 5 ft. (1.5 m.).	Sqm	109.59	654.39	
B)	For depth below 5 ft. to 10 ft. (1.5 m to 3.0 m.)	Sqm	125.24	717.45	
C)	For depth below 10 ft. to 15 ft. (3.0 m to 4.5 m.)	Sqm	140.90	1021.80	
D)	For depth below 15 ft. to 20 ft. (4.5 m to 6 m.)	Sqm	156.55	1152.94	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
3-44	Providing and fixing open shuttering and timbering for excavation in open cutting for sewers and manholes as shown in drawings and removing of timbering after completion of job.				
A)	For depth upto 5 ft. (1.5 m.).	Sqm	109.59	463.68	
B)	For depth below 5 ft. to 10 ft. (1.5 m to 3.0 m.)	Sqm	125.24	526.74	
C)	For depth below 10 ft. to 15 ft. (3.0 m to 4.5 m.)	Sqm	140.90	751.62	
D)	For depth below 15 ft. to 20 ft. (4.5 m to 6 m.)	Sqm	156.55	882.76	
3-45	Excavation in open cutting for sewer and manholes as shown in drawings below sub-soil water level to correct section and dimension according to templates and levels including shoring, timbering and shuttering of M.S. sheets on both sides of the trenches.				
A)	Upto 4 ft. (1.25 m) depth below S.S.W.L.	Cu.m	704.88	1153.85	
B)	Below 4 ft. to 8 ft. (1.25 m to 2.50 m) depth below S.S.W.L.	Cu.m	1057.32	1506.29	
C)	Exceeding below 8 ft. (2.5 m.) depth below S.S.W.L.	Cu.m	1409.76	1858.73	
3-46	Levelling and dressing the ground by cutting and filling of earth in depth upto 6 inches including consolidating.				
A)	Rough Levelling in Ordinary Soil				
i)	Plain Area	Sqm	0.64	27.64	
ii)	Sloppy Area	Sqm	1.28	55.28	
B)	Rough Levelling Hard Soil				
i)	Plain Area	Sqm	1.07	46.07	
ii)	Sloppy Area	Sqm	2.14	92.14	
C)	Rough Levelling Sandy Soil				
i)	Plain Area	Sqm	0.43	18.43	
ii)	Sloppy Area	Sqm	0.85	36.85	
D)	Extra for Lazer Levelling				
i)	Normal Soil	Sqm	1.11	2.55	
ii)	Hard Soil	Sqm	1.47	3.39	
iii)	Sandy Soil	Sqm	0.92	2.12	
3-47	Cutting and removing trees within a distance of 100 ft. (30m)				
A)	Upto 2.5 ft. (0.75 m.) girth	Each	1965.12		
B)	Above 2.5 ft. to 6 ft. (0.75 m to 1.8 m.) girth	Each	3844.80		
3-48	Up-rooting & removing stumps upto 100 ft.(30m) from 1.5 ft. to 6 ft. (0.50m to 1.75m) girth.	Each	2563.20		
3-49	Jungle clearance and removing upto 100 ft. (30m.)				
A)	Light	Sqm	367.39		
B)	Thick	Sqm	734.78		
3-50	Uprooting sarkanda growth & disposal upto 100 ft. (30 m.)	Sqm	17.09		
3-51	Ploughing three (3) times.	Hectare	28596.67		
3-52	Levelling, dressing & making lawns.	Sqm	72.62		
3-53	Turfing lawns (excluding cost of turf).	Sqm	61.94		
3-54	Clearing jungle by cutting, removing all shrubs, trees and taking out entire roots and filling the hollows with earth, dressing, consolidating and watering the filling including stacking the serviceable material and disposal of unserviceable material lead upto 1000 ft. (300 m.)	Sqm	85.44		
3-55	Manual Levelling and dressing the ground by cutting and filling earth upto 6 inches (150mm) in depth including consolidating and watering. To be used for area less than 100 sq.m, for areas more than 100 sq.m item No. 3-46 to be utilized.	Sqm	32.04		
3-56	Excavation of shaft of Karez of internal size of 1m x 1.75m in including loading and disposal of excavated material within 30m (100 Ft) lead in ordinary soil/sand.				
A)	Up to 6m (20Ft) below ground level in dry condition	R.M	5024.04		
B)	6m to 12m below ground level in dry condition	R.M	6826.68		
C)	12m to 50m below ground level in dry condition	R.M	8192.02		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
D)	50m to 75m below ground level in dry condition	R.M	9420.82		
E)	75m to 100m below ground level in dry condition	R.M	10362.90		
F)	Above 100m below ground level to any depth in dry condition	R.M	10881.05		
G)	Additional for wet conditions for items 3-56(A-F)	R.M	15%		
H)	Additional for below spring level/in flowing conditions for items 3-56(A-F)	R.M	25%		
3-57	Excavation of tunnel of Karez of internal size 1m x 1.75m including loading and disposal of excavated material within 30m in ordinary soil/sand				
A)	Up to 6m (20Ft) below ground level in any length and in dry condition	R.M	7355.88		
B)	6m to 12m below ground level in any length and in dry condition	R.M	10507.56		
C)	12m to 50m below ground level in any length and in dry condition	R.M	12609.07		
D)	50m to 75m below ground level in any length and in dry condition	R.M	14500.43		
E)	75m to 100m below ground level in any length and in dry condition	R.M	15950.48		
F)	Above 100m below ground level in any length and to any depth in dry condition	R.M	16748.00		
G)	Additional for wet conditions for items 3-57(A-F)	R.M	15%		
H)	Additional for below spring level/in flowing conditions for items 3-57(A-F)	R.M	25%		
I)	Cleaning of Karez silt/debris of any length in the range of depths as mentioned in items 3-57(A-F)	R.M	25%		
3-58	Excavation of shaft of Karez of internal size of 1m x 1.75m in including loading and disposal of excavated material within 30m (100 Ft) lead in hard soil				
A)	Up to 6m (20Ft) below ground level in dry condition	R.M	6303.36		
B)	6m to 12m below ground level in dry condition	R.M	9455.04		
C)	12m to 50m below ground level in dry condition	R.M	11346.05		
D)	50m to 75m below ground level in dry condition	R.M	13047.96		
E)	75m to 100m below ground level in dry condition	R.M	14352.75		
F)	Above 100m below ground level to any depth in dry condition	R.M	15070.39		
G)	Additional for wet conditions for items 3-58(A-F)	R.M	15%		
H)	Additional for below spring level/in flowing conditions for items 3-58(A-F)	R.M	25%		
3-59	Excavationof tunnel of Karez of internal size 1m x 1.75m including loading and disposal of excavated material within 30m in hard soil				
A)	Up to 6m (20Ft) below ground level in any length and in dry condition	R.M	9455.04		
B)	6m to 12m below ground level in any length and in dry condition	R.M	7808.64		
C)	12m to 50m below ground level in any length and in dry condition	R.M	9370.37		
D)	50m to 75m below ground level in any length and in dry condition	R.M	10775.92		
E)	75m to 100m below ground level in any length and in dry condition	R.M	11853.52		
F)	Above 100m below ground level in any length and to any depth in dry condition	R.M	12446.19		
G)	Additional for wet conditions for items 3-59(A-F)	R.M	15%		
H)	Additional for below spring level/in flowing conditions for items 3-59A-F	R.M	25%		
I)	Additional for Cleaning of Karez silt/debris of any length in the range of depths as mentioned in items 3-59A-F	R.M	20%		
3-60	Excavation of shaft of Karez of internal size of 1m x 1.75 m in including loading and disposal of excavated material within 30m (100 Ft) lead in in hard strata including shingle, gravel or equivalent.				
A)	Up to 6m (20Ft) below ground level in dry condition	R.M	9719.64		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
B)	6m to 12m below ground level in dry condition	R.M	16555.14		
C)	12m to 50m below ground level in dry condition	R.M	19866.17		
D)	50m to 75m below ground level in dry condition	R.M	22846.09		
E)	75m to 100m below ground level in dry condition	R.M	25130.70		
F)	Above 100m below ground level to any depth in dry condition	R.M	26387.24		
G)	Additional for wet conditions for items 3-60 from (A-F)	R.M	15%		
H)	Additional for below spring level/in flowing conditions for items 3-60 from (A-F)	R.M	25%		
3-61	Excavation of tunnel of Karez of internal size 1m x 1.75m including loading and disposal of excavated material within 30m in hard strata i/c shingle, gravel or equivalent				
A)	Up to 6m (20Ft) below ground level in any length and in dry condition	R.M	12345.06		
B)	6m to 12m below ground level in any length and in dry condition	R.M	17613.54		
C)	12m to 50m below ground level in any length and in dry condition	R.M	21136.25		
D)	50m to 75m below ground level in any length and in dry condition	R.M	24306.69		
E)	75m to 100m below ground level in any length and in dry condition	R.M	26737.35		
F)	Above 100m below ground level in any length and to any depth in dry condition	R.M	28074.22		
G)	Additional for wet conditions for items 3-61(A-F)	R.M	15%		
H)	Additional for below spring level/in flowing conditions for items 3-61(A-F)	R.M	25%		
I)	Additional for Cleaning of Karez silt/debris of any length in the range of depths as mentioned in items 3-61 from (A-F)	R.M	20%		
3-62	Excavation of shaft of Karez of internal size of 1m x 1.75m in including loading and disposal of excavated material within 30m (100 Ft) lead in soft to medium rock or shale/lime stone				
A)	Up to 6m (20Ft) below ground level in dry condition	R.M	21538.44		
B)	6m to 12m below ground level in dry condition	R.M	27588.96		
C)	12m to 50m below ground level in dry condition	R.M	33106.75		
D)	50m to 75m below ground level in dry condition	R.M	38072.76		
E)	75m to 100m below ground level in dry condition	R.M	41880.04		
F)	Above 100m below ground level to any depth in dry condition	R.M	43974.04		
G)	Additional for wet conditions for items 3-62(A-F)	R.M	15%		
H)	Additional for below spring level/in flowing conditions for items 3-62(A-F)	R.M	25%		
3-63	Excavationof tunnel of Karez of internal size 1m x 1.75 m including loading and disposal of excavated material within 30m in in soft to medium rock or shale/lime stone				
A)	Up to 6m (20Ft) below ground level in any length and in dry condition	R.M	22070.58		
B)	6m to 12m below ground level in any length and in dry condition	R.M	23867.76		
C)	12m to 50m below ground level in any length and in dry condition	R.M	28641.31		
D)	50m to 75m below ground level in any length and in dry condition	R.M	32937.51		
E)	75m to 100m below ground level in any length and in dry condition	R.M	36231.26		
F)	Above 100m below ground level in any length and to any depth in dry condition	R.M	38042.82		
G)	Additional for wet conditions for items 3-63(A-F)	R.M	15%		
H)	Additional for below spring level/in flowing conditions for items 3-63(A-F)	R.M	25%		
I)	Additional for Cleaning of Karez silt/debris of any length in the range of depths as mentioned in items 3-63 from (A-F)	R.M	20%		
3-64	Excavation of shaft of Karez of internal size of 1m x 1.75m in including loading and disposal of excavated material within 30m (100 Ft) lead in hard rock				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
A)	Up to 6m (20Ft) below ground level in dry condition	R.M	47292.84		
B)	6m to 12m below ground level in dry condition	R.M	57041.88		
C)	12m to 50m below ground level in dry condition	R.M	68450.26		
D)	50m to 75m below ground level in dry condition	R.M	78717.79		
E)	75m to 100m below ground level in dry condition	R.M	86589.57		
F)	Above 100m below ground level to any depth in dry condition	R.M	90919.05		
G)	Additional for wet conditions for items 3-64(A-F)	R.M	15%		
H)	Additional for below spring level/in flowing conditions for items 3-64 from (A-F)	R.M	25%		
3-65	Excavation of tunnel of Karez of internal size 1m x 1.75m including loading and disposal of excavated material within 30m in hard rock.				
A)	Up to 6m (20Ft) below ground level in any length and in dry condition	R.M	33110.28		
B)	6m to 12m below ground level in any length and in dry condition	R.M	74123.28		
C)	12m to 50m below ground level in any length and in dry condition	R.M	88947.94		
D)	50m to 75m below ground level in any length and in dry condition	R.M	102290.13		
E)	75m to 100m below ground level in any length and in dry condition	R.M	112519.14		
F)	Above 100m below ground level in any length and to any depth in dry condition	R.M	118145.10		
G)	Additional for wet conditions for items 3-65 from (A-F)	R.M	15%		
H)	Additional for below spring level/in flowing conditions for items 3-65(A-F)	R.M	25%		
I)	Additional for Cleaning of Karez silt/debris of any length in the range of depths as mentioned in items 3-65 from (A-F)	R.M	20%		
3-66	Cutting to a required gradient in all kinds of soil and disposing the same, levelling, dressing, watering and consolidation lead upto 100ft. (30m).	Cu.m	758.28		
3-67	Cutting to a required gradient in all kinds of soil and disposing the same, levelling, dressing but without watering and consolidation lead upto 100 ft. (30m)	Cu.m	623.14		
3-68	Providing turf only	Sqm		336.00	
3-69	Spraying approved anti-termite chemical mixed with water in the ratio of 1:40	Sqm	13.30	144.09	
3-70 (A)	Excavation of trenches for water supply pipe lines upto 5 ft. (1.5m) depth from ground level, including trimming, dressing sides, levelling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects including cost of back filling.				
i)	Ordinary soil	Cu.m	431.47		
ii)	Hard Soil	Cu.m	632.26		
iii)	Shingle and Gravel	Cu.m	803.14		
3-70 (B)	Two coats of hot bitumen soaked with hessian cloth, 1.25kg of bitumen per square meter for water supply pipe.	Cu.m	271.92	465.72	
3-71(A)	Cutting rock for water supply pipe lines in trenches upto 5 ft. (1.5m) depth from ground level, including trimming, dressing sides, levelling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects including cost of back filling. Laying of pipes 1 inch to 12 inch of any kind	Cu.m	1567.20		
3-71(B)	Two coats of hot bitumen soaked with hessian cloth, 1.25kg of bitumen per square meter.	Sqm	271.92	465.72	
3-72	Transportation of earth all types when the total distance including the lead covered in the item of work is more than 250 metres except item No. 3-16(c)	Cu.m	Please see section-1 (Carriage)		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
3-73	Earthwork excavation in open cutting from 10ft. to 15 ft (3 m to 4.5 m) depth for storm water channels, drains, sullage drains in open area, roads, streets lanes and shoring to protect existing works, shuttering and timbering the trenches dressed to designed level and dimension, trimming from trenches, backfilling and disposal of surplus excavated material upto 100 ft (30 m) including dressing, excluding removal of surface water from drains.				
A)	In ashes, sand, soft soil or silt clearance.	Cu.m	144.53	494.04	
B)	Ordinary soil	Cu.m	157.34	619.54	
C)	Hard soil	Cu.m	180.84	756.87	
D)	Shingle or gravel	Cu.m	212.88	909.07	
3-74	Earthwork excavation in open cutting from 15ft. to 20 ft (4.5 m to 6 m) depth for storm water channels, drains, sullage drains in open area, roads, streets lanes and shoring to protect existing works, shuttering and timbering the trenches dressed to designed level and dimension, trimming from trenches, backfilling and disposal of surplus excavated material upto 100 ft (30 m) including dressing, excluding removal of surface water from drains.				
A)	In ashes, sand, soft soil or silt clearance.	Cu.m	177.53	616.61	
B)	Ordinary soil	Cu.m	190.34	713.44	
C)	Hard soil	Cu.m	213.84	879.44	
D)	Shingle or gravel	Cu.m	245.88	1026.24	
3-75	Sludge removal in drains and disposal with 1 Km	Cu.m	83.30	583.73	

SECTION – 4

DISMANTLING (DEMOLITION)

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS, DEBRIS, UNUSED MATERIAL AND BY PRODUCTS

2. THE RATES FOR DISMANTLING ROOFS OR UPPER STORY FLOOR INCLUDE DISMANTLING OF ALL MATERIALS, EXCEPT ROOF SUPPORTS SUCH AS BEAM AND TRUSSES

3. ADD EXTRA 20% AND 25% FOR SECOND AND THIRD AND 30% FOR FORTH AND SUBSEQUENT FLOORS RESPECTIVELY

Sr. No.		Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
				Labour	Composite	
		STONE WORK				
4-1-1		Dismantling dry stone masonry	Cu. m.	410.11		
4-2-1		Dismantling stone masonry in mud mortar.	Cu. m.	604.49		
4-3-1		Dismantling stone masonry in lime or cement mortar.	Cu. m.	1448.21		
4-4	A	Dismantling dry stone or spawl pitching.	Cu. m.	724.10		
	B	Dismantling stone or spawl pitching (mud grouted).	Cu. m.	275.54		
4-5-1		Dismantling stone or spawl pitching and apron in silted condition.	Cu. m.	1206.84		
4-6-1		Dismantling stone pitching, cement or lime grouted.	Cu. m.	1930.94		
4-7		Dismantling stone in				
	A	Wooden crates	Cu. m.	965.47		
	B	Wire mesh crates	Cu. m.	1208.12		
	C	Mild steel mesh crates	Cu. m.	1495.20		
4-8-1		Dismantling stoneware drain including base concrete	Cu. m.	674.98		
		BRICK WORK				
4-9-1		Dismantling mud/pise walling	Cu. m.	241.37		
4-10-1		Dismantling sundried brick masonry	Cu. m.	604.49		
4-11	A	Dismantling dry brick masonry in ground floor	Cu. m.	410.11		
	B	Extra for first floor	Cu. m.	74.76		
4-12	A	Dismantling brickwork in mud mortar	Cu. m.	845.86		
	B	Extra for first floor	Cu. m.	149.52		
4-13	A	Dismantling brickwork in lime or cement mortar upto 9" width	Cu. m.	2052.70		
	B	Dismantling brickwork in lime or cement mortar greater than 9"width	Cu. m.	2349.60		
	C	Extra for first floor upto 9" width	Cu. m.	352.44		
	D	Extra for first floor greater than 9" width	Cu. m.	416.52		
4-14	A	Dismantling cement block masonry upto 8" width	Cu. m.	1811.33		
	B	Dismantling cement block masonry greater than 8" width	Cu. m.	2136.00		
	C	Extra for first floor upto 8" width	Cu. m.	320.40		
	D	Extra for first floor greater than 8" width	Cu. m.	384.48		
4-15-1		Dismantling dhajji walling	Cu. m.	482.74		
		CONCRETE				
4-16-1		Dismantling mud concrete	Cu. m.	965.47		
4-17-1		Dismantling lime concrete	Cu. m.	1328.59	1527.88	
4-18-1		Dismantling lime or cement concrete under water.	Cu. m.	5070.86	5831.49	
4-19	A	Dismantling plain cement concrete 1 : 2 : 4 & richer mixes	Cu. m.	427.20	3164.40	
	B	Dismantling plain cement concrete 1 : 3 : 6	Cu. m.	427.20	2233.75	
	C	Dismantling plain cement concrete 1 : 4 : 8 & leaner mixes	Cu. m.	2655.05	4461.60	
	D	Dismantling cement concrete with brick aggregate	Cu. m.	1448.21	1665.44	
	E	Dismantling 2 inch (50 mm.) thick cement concrete D.P.C.	Cu. m.	724.10	868.92	
4-20-1		Dismantling reinforced cement concrete, separating reinforcement from concrete, clearing and straightening the same	Cu. m.	2136.00	6241.80	
		ROOFING				
4-21-1		Dismantling sirki, sarkanda or thached roofing, supported on battens or ballies	Sq. m.	87.58		

Sr. No.		Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
				Labour	Composite	
4-22	A	Dismantling 1st class tile roofing	Sq. m.	220.01		
	B	Dismantling 2nd class tile roofing	Sq. m.	183.70		
4-23-1		Dismantling from any height, asbestos sheets and ridge coping	Sq. m.	114.65		
4-24	A	Dismantling roof of wooden planks and battens from any height	Sq. m.	110.81		
	B	Dismantling wooden ceiling above 20 ft. (6 m.) height in difficult position, including lifting with care and special scaffolding along live electric wires with machines underneath	Sq. m.	387.86		
4-25-1		Dismantling jack arch roofing including removal of joints	Sq. m.	294.77		
4-26-1		Dismantling R.B. roof complete with mud and mud plaster, including separating reinforcement, clearing and straightening the same.	Sq. m.	367.39		
4-27	A	Stripping and stacking slate or tiles from the truss roofing	Sq. m.	126.02		
	B	Stripping and stacking G.I. sheet roof	Sq. m.	167.16		
	C	Extra for dismantling G.I. sheet roof above 20 ft. (6 m.) in difficult position, including lifting with special scaffolding along live electric wire with machine underneath	Sq. m.	183.70		
	D	Dismantling R.S. beam in ground floor and stacking lead upto 300 ft. (90m.)	Sq. m.	36.31		
	E	Dismantling planked ceiling and its supporting timber in ground floor including stacking serviceable material & disposal of unserviceable material upto 300 ft. (90 m.)	Sq. m.	218.16		
4-28-1		Dismantling slates or tiles including battens, purlins and planking.	Sq. m.	294.77		
		FLOORING				
4-29-1		Dismantling brick or flagged flooring without concrete foundation.	Sq. m.	126.02		
4-30	A	Dismantling plank or wooden block flooring etc	Sq. m.	183.70		
	B	Dismantling stone or precast slab floors of any thickness in any matter including stacking serviceable material and disposing of surplus material lead upto 300 ft.(90m)	Sq. m.	961.20		
	C	Dismantling cement tiled/terrazzo floor in basement, plinth and ground floor including base mortar and staking salvaged material (serviceable) and disposing of surplus stuff as directed within 300 ft. (90 m.)	Sq. m.	843.72		
	D	Dismantling dado or skirting in basement, plinth and ground floor including base mortar and staking salvaged material (serviceable) and disposing of surplus stuff as directed within 300 ft. (90 m.)	Sq. m.	792.46		
4-31-1		Disjoining RCC pipes inside the trench, dismantling and removing the pipes from the trench and stacking them outside.				
	A	6 inches to 12 inches (150 mm to 300 mm.) diameter	R.M.	213.60		
	B	Above 1 ft. to 2 ft. (300mm to 600mm.) diameter	R.M.	320.40		
	C	Above 2 ft to 3 ft. (600mm to 900mm) diameter	R.M.	373.80		
	D	Above 3 ft. (900 mm) diameter	R.M.	640.80		
		WOOD WORK				
4-32	A	Removing door with chowkat	R.M.	616.32		

Sr. No.		Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
				Labour	Composite	
	B	Above 1 ft. to 2 ft. (300mm to 600mm.) diameter	R.M.	482.88		
4-33-1		Removing ventilators and wooden sunshades, etc.	Each	253.44		
4-34	A	Dismantling wooden beams upto 13 ft. (4 m.) in length	Each	427.20		
	B	Dismantling wooden beams from 13 ft to 23 ft. (4 m. to 7 m.)	Each	683.52		
4-35	A	Dismantling wooden partition jaffry work	Sq. m.	89.40		
	B	Dismantling wooden Trusses	Sq. m.	2383.78		
4-36-1		Dismantling wooden palisade fencing	R.M.	225.98		
		IRON WORK				
4-37-1		Dismantling iron-work of trusses, sheds, water tanks excluding cutting of rivets.	%Kg	2563.20		
4-38-1		Unloading earth from B.G. trucks and clearing 5 ft. (1.5 m) from rail	%Kg	1388.40		
4-39-1		Dismantling iron latrine	Unit of Two Seats	2499.84		
4-40-1		Dismantling tees,bends or sluice value upto 12 inches (300 mm) bore	Each for 25 mm bore	683.09		
4-41	A	Dismantling B.G. water column	Each	16752.00		
	B	Dismantling M.G. or N.G. water column.	Each	11025.60		
4-42-1		Dismantling all type of wire fencing including rolling wire into bundles and collecting material	R.M.	36.31		
		MISCELLANEOUS				
4-43-1		Dismantling wire netting of tennis courts and frame work	Sq. m.	59.81		
4-44-1		Dismantling cloth ceiling and supporting timber	Sq. m.	108.94		
4-45	A	Dismantling and removing road metalling	Cu. m.	442.50		
	B	Dismantling and removing road pavement, etc. including screening and stacking of by product upto 100 ft. (30 m.) lead.	Cu. m.	1296.90		
4-46	A	Removing mud plaster from walls (where no scaffolding is required)	Sq. m.			
	B	Removing earth, mud plaster and gobri leaping from roof including disposal up to 100 ft. (90 m)				
	i	3 inches (75 mm) earth filling and mud plaster 1 inch (25 mm) thick	Sq. m.	320.40		
	ii	4 inches (100 mm) earth filling and mud plaster 1 inch (25 mm) thick	Sq. m.	427.20		
4-47-1		Removing cement or lime plaster from walls (where no scaffolding is required)	Sq. m.	61.94		
		SCRAPING				
4-48	A	White wash or color wash from walls and ceiling	Sq. m.	29.90		
	B	Ordinary distemper, oil free distemper from walls and ceiling	Sq. m.	111.07		
4-49-1		Dismantling glazed or encaustic tiles from walls (where no scaffolding is required)	Sq. m.	354.38		
4-50-1		Scraping boulders	Cu. m.	1687.44		
4-51-1		Cleaning mortar of old stones to be used in masonry	Cu. m.	854.40		
		ELECTRICAL WIRING				
4-52-1		Dismantling light, fan and call bell point including casing and capping strip open type and making good damaged surface	Per Point	114.00	125.40	
4-53-1		Dismantling plug point and making good damaged surface	Per Point	120.00	132.00	
4-54		Dismantling G.I/ M.S. conduit/ G.I. flexible/ PVC pipes or conduit wiring etc. of all sizes including making good damaged surface.				

Sr. No.		Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
				Labour	Composite	
	A	On surface	R.M.	72.00	82.80	
	B	Recessed in wall	R.M.	162.00	186.30	
		SURFACE RENDERING				
4-55-1		Scraping, rubbing and cleaning of oil bound distemper from ceiling and walls including removal of rubbish in all floors.	Sq. m.	64.08	112.89	
4-56-1		Scraping, rubbing and cleaning emulsion finish distemper, snowcem and paints of all sort from walls and ceiling including removal of rubbish in all floors.	Sq. m.	106.80	141.10	
4-57-1		Brushing and cleaning with solution of cautic soda the surface of stone masonry, brick masonry and concrete including removal of rubbish in all floor.	Sq. m.	53.40	84.23	
4-58		Removing mud plaster & disposing of the rubbish.				
	A	From walls	Sq. m.	85.44	89.71	
	B	From roof	Sq. m.	64.08	67.28	
4-59-1		Removing cement or lime plaster of any thickness from ceiling and disposing of the rubbish in any floor	Sq. m.	96.12	100.93	
4-60-1		Removing stains from wood work by scraping or applying any approved chemical including removal of rubbish from the site	Sq. m.	42.72	57.28	
4-61-1		Scraping old paints of all sorts with blow lamp from wood, plastered, rendered and/or concrete surface including rubbing, cleaning and removal of rubbish from site	Sq. m.	51.36	80.65	
4-62-1		Scraping old paint of all sorts with blow lamp from steel and iron work including rubbing, cleaning and removal of rubbish from site	Sq. m.	38.52	62.39	
4-63-1		Removing all sorts of varnish and polishes without blow lamp from wooden surface including removal of rubbish from site	Sq. m.	25.68	40.95	
4-64-1		Dismantling from any height, fiber glass sheets roofing and ridge	Sq. m.	145.56		
4-65		Add extra for respective payable item of ground floor				
	A	For first floor	% Increase	10.00%		
	B	For every additional floor above first floor	% Increase	7.50%		

SECTION – 5

PLAIN AND REINFORCED CONCRETE

1. THE STEEL REINFORCEMENT SHALL HOWEVER BE PAYABLE SEPARATELY UNDER APPLICABLE ITEMS 5-43, 5-44 OR 5-65 OF SCHEDULE

2. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

3. SCAFFOLDING AND FORMWORK RATE IS FOR ALL TYPES OF MATERIALS INCLUDING STEEL, WOOD, PLY AND PVC

4. 10% REDUCTION IN RATES OF CONCRETE WORKS SHALL BE MADE IF SHINGLE / GRAVEL IS USED IN PLACE OF CRUSHED AGGREGATE

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
5-1	Dry ramming brick/ stone ballast 1-1/2" to 2" (40mm to 50mm) gauge	Cu.m	956.93	4152.65	
5-2	Providing and laying plain hand mixed cement concrete using brick/ Stone ballast 1-1/2" to 2" (40mm to 50mm) with approved source sand in foundation and plinth including leveling, compacting and curing.				
a)	1 : 3 : 6	Cu.m	3654.58	15247.87	
b)	1 : 4 : 8	Cu.m	3654.58	13316.24	
c)	1 : 5 : 10	Cu.m	3654.58	12262.12	
d)	1 : 6 : 12	Cu.m	3654.58	11548.62	
5-3	Extra labour charges on item No. 5-2 above for sedimentation tank or filter beds of Public Health engineering works				
a)	In bed		1174.30		
b)	On slope		1754.66		
5-4	Providing and laying plain hand mixed cement concrete using sand approved source and crushed aggregate having maximum size upto 1-1/2" (38mm) & down gauge in foundation and plinth including leveling, compacting & curing.				
a)	1 : 3 : 6	Cu.m	3654.58	14273.56	
b)	1 : 4 : 8	Cu.m	3654.58	12247.53	
c)	1 : 5 : 10	Cu.m	3654.58	11148.82	
d)	1 : 6 : 12	Cu.m	3654.58	10107.67	
5-5	Providing and laying plain machine mixed cement concrete using coarse sand and crushed aggregate having maximum size upto 1-1/2" (38mm) & down gauge in foundation including levelling, compacting and curing.				
a)	1 : 2 : 4	Cu.m	4907.64	18946.46	
b)	1 : 3 : 6	Cu.m	4907.64	16202.57	
c)	1 : 4 : 8	Cu.m	4907.64	14176.43	
d)	1 : 5 : 10	Cu.m	4907.64	13079.01	
e)	1 : 6 : 12	Cu.m	4907.64		
5-6	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in sills and Bed Plate including formwork and its removal, compacting and curing	Cu.m	3654.58	18076.52	
5-7	Deduct for item 5-5 above if Local approved fine sand is used instead of approved coarse sand				
a)	1 : 2 : 4	Cu.m		50.80	
b)	1 : 3 : 6	Cu.m		53.17	
c)	1 : 4 : 8	Cu.m		54.35	
d)	1 : 5 : 10	Cu.m		55.53	
e)	1 : 6 : 12	Cu.m		56.71	
5-8	Providing and laying cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in foundation including leveling, compacting and curing.				
a)	1 : 1 : 2	Cu.m	4907.64	27461.40	
b)	1 : 1.5 : 3	Cu.m	4907.64	21975.41	
c)	1 : 2 : 4	Cu.m	4907.64	18906.78	
d)	1 : 3 : 6	Cu.m	4907.64	16544.59	
e)	1 : 4 : 8	Cu.m	4907.64	14145.62	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
5-9-1	Providing and laying 3" x 3" (75mm x 75mm) cement concrete 1:2:4 gola using crushed aggregate at junction of roof slab and wall and finished with 1/4" (6.4mm) thick cement plaster 1:4 including curing.	R.M	67.40	355.36	
5-10	Deduct for item 5-8 above if Local sand approved source is used instead of approved coarse sand.				
a)	1 : 1 : 2	Cu.m		46.08	
b)	1 : 1.5 : 3	Cu.m		49.62	
c)	1 : 2 : 4	Cu.m		51.98	
d)	1 : 3 : 6	Cu.m		55.53	
e)	1 : 6 : 12	Cu.m		56.71	
5-11	Providing and laying in situ cement concrete using approved coarse sand and crushed aggregate having maximum size upto 1-1/2" (38mm) and down gauge in foundation including formwork and its removal, compaction and curing				
a)	1 : 2 : 4	Cu.m	3408.60	19151.66	
b)	1 : 3 : 6	Cu.m	3408.60	16407.77	
c)	1 : 4 : 8	Cu.m	3408.60	14381.63	
d)	1 : 5 : 10	Cu.m	3408.60	13284.21	
e)	1 : 6 : 12	Cu.m	3408.60	12243.07	
5-12	Providing and laying in situ cement concrete using approved coarse sand and crushed aggregate having maximum size upto 3/4" (19mm) and down gauge in foundation including formwork using wooden braces and without wall ties, compaction, curing and removal of formwork				
a)	1 : 2 : 4	Cu.m	3408.60	18914.28	
b)	1 : 3 : 6	Cu.m	3408.60	16587.00	
c)	1 : 4 : 8	Cu.m	3408.60	14223.48	
d)	1 : 5 : 10	Cu.m	3408.60	13215.72	
e)	1 : 6 : 12	Cu.m	3408.60	12555.96	
5-13	Providing & laying in situ cement concrete in wall and piers etc, upto 12" (300 mm) in thickness using approved coarse sand & crushed aggregate 3/4" (19mm) & down gauge including compacting, curing, cost of formwork and its removal in basement and ground floor				
a)	1 : 1 : 2	Cu.m	3156.60	29100.12	
b)	1 : 1.5 : 3	Cu.m	3156.60	23614.13	
c)	1 : 2 : 4	Cu.m	3156.60	20545.50	
d)	1 : 3 : 6	Cu.m	3156.60	18183.31	
e)	1 : 4 : 8	Cu.m	3156.60	15784.34	
f)	Extra for first floor	Cu.m	3473.33	3874.46	
g)	Extra for every additional floor above first floor	Cu.m	3434.83	3735.68	
5-14	Same as in Item 5 -7 but in walls and piers above 12" (300mm) in thickness.				
a)	1 : 1 : 2	Cu.m	3156.60	28422.36	
b)	1 : 1.5 : 3	Cu.m	3156.60	22936.37	
c)	1 : 2 : 4	Cu.m	3156.60	19867.74	
d)	1 : 3 : 6	Cu.m	3156.60	17505.55	
e)	1 : 4 : 8	Cu.m	3156.60	15106.58	
f)	Extra for first floor	Cu.m	315.66	649.02	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
g)	Extra for every additional floor above first floor	Cu.m	236.75	486.77	
5-15	Providing and laying in situ cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in pillars and columns of any shape in super structure including compacting, curing, cost of form-work & its removal in basement and ground floor.				
a)	1 : 1 : 2	Cu.m	3156.60	30793.56	
b)	1 : 1.5 : 3	Cu.m	3156.60	25307.57	
c)	1 : 2 : 4	Cu.m	3156.60	22238.94	
d)	1 : 3 : 6	Cu.m	3156.60	19876.75	
e)	Extra for first floor	Cu.m	315.66	886.14	
f)	Extra for every additional floor above first floor	Cu.m	236.75	664.61	
g)	Extra for minarets of Masjid / mosque	Cu.m	315.66	886.14	
5-16(a)	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in beams, lintels and cantilevers of required shape or section including formwork and its removal compacting and curing in basement and ground floor.	Cu.m	3156.60	21778.14	
b)	Extra for first floor	Cu.m	315.66	840.06	
c)	Extra for every additional floor above first floor	Cu.m	236.75	630.05	
5-17	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in slabs including formwork and its removal, compacting and curing				
a)	Upto 6" (150 mm) thickness				
i)	In basement, plinth and ground floor	Cu.m	3156.60	22200.54	
ii)	Extra for first floor	Cu.m	315.66	882.30	
iii)	Extra for every additional floor above first floor	Cu.m	236.75	661.73	
iv)	Extra for sloping roofs for slope more than 15 degrees	Cu.m	157.83	441.15	
b)	Above 6" (150 mm) upto 12" (300 mm) thickness				
i)	In basement, plinth and ground floor	Cu.m	3156.60	20878.62	
ii)	Extra for first floor	Cu.m	315.66	750.11	
iii)	Extra for every additional floor above first floor	Cu.m	236.75	562.58	
iv)	Extra for sloping roofs for slope more than 15 degrees	Cu.m	157.83	375.05	
c)	Above 12" (300 mm) thickness				
i)	In basement, plinth and ground floor	Cu.m	3156.60	18660.54	
ii)	Extra for first floor	Cu.m	315.66	528.30	
iii)	Extra for every additional floor above first floor	Cu.m	236.75	396.23	
iv)	Extra for sloping roofs for slope more than 15 degrees	Cu.m	157.83	264.15	
5-18	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in barrel type shell roof upto 4" (100mm) in thickness including formwork and its removal, compacting & curing				
i)	In Ground Floor	Cu.m	6659.40	36130.46	
ii)	Extra for first floor	Cu.m	665.94	2295.06	
iii)	Extra for every additional floor above first floor	Cu.m	499.46	1721.30	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
5-19	Providing and laying in situ cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in arches with spandrels, in basement and ground floor including compacting, curing, cost of formwork and its removal				
a)	1 : 1 : 2	Cu.m	3156.60	29269.61	
b)	1 : 1.5 : 3	Cu.m	3156.60	23783.61	
c)	1 : 2 : 4	Cu.m	3156.60	20714.99	
d)	1 : 3 : 6	Cu.m	3156.60	19496.84	
e)	Extra for first floor	Cu.m	315.66	733.74	
f)	Extra for every additional floor above first floor	Cu.m	236.75	550.31	
5-20(a)	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in balustrade of stairs or balcony, sun breakers, sun shades, parapets and eave boards upto 3" (75 mm) of required shape or section including formwork & its removal, compacting and curing in basement and ground floor.	Cu.m	3156.60	24381.66	
b)	Extra for first floor	Cu.m	315.66	1100.41	
c)	Extra for every additional floor above first floor	Cu.m	236.75	761.75	
5-21(a)	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) & down gauge in stairs of any shape or section including formwork & its removal, compacting and curing in basement and ground floor.	Cu.m	3156.60	20885.34	
b)	Extra for first floor	Cu.m	315.66	750.78	
c)	Extra for every additional floor above first floor	Cu.m	236.75	563.09	
5-22	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in underground tank, septic tank and underground drain including formwork and its removal, compacting and curing.				
a)	Foundation and floor slab	Cu.m	3156.60	17729.15	
b)	Walls	Cu.m	3156.60	19867.74	
c)	Top slab upto 6" (150 mm) thick	Cu.m	3156.60	22200.54	
5-23	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in overhead water tanks and silos at a height of 10m (32.8') above ground level including formwork and its removal, compacting and curing.				
a)	Column footing	Cu.m	3156.60	17729.15	
b)	Columns and braces	Cu.m	6063.00	35478.82	
c)	Beams	Cu.m	6063.00	36634.42	
d)	Walls	Cu.m	3156.60	21701.10	
e)	Bottom slab	Cu.m	6063.00	25878.78	
f)	Top slab	Cu.m	6063.00	28369.38	
g)	Extra for every additional height of 3 ft. (1 m) or part thereof above Item 5-23 (a to f)	Cu.m	640.80		
h)	Deduction for every lesser height of 3 ft (1 m.) or part thereof above Item 5-23 (a to f)	Cu.m	576.72		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
5-24	Extra on item 5-16 to 5-18 and 5-20 to 5-23 for cement concrete 1:1.5:3 instead of 1:2:4.	Cu.m		3266.33	
5-25	Extra on item 5-16 to 5-18 and 5-20 to 5-23 for cement concrete 1:1:2 instead of 1:2:4.	Cu.m		8752.32	
5-26	Providing and laying in position ready mixed concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per mix design to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge.				
a)	3000 Psi	Cu.m	5140.66	24020.10	
b)	4000 Psi	Cu.m	5140.66	26934.04	
c)	5000 Psi	Cu.m	5140.66	32378.55	
d)	Additional for Shuttering and Scafolding (including on a, b or c for Foundations, Bed Plates and Sills	Cu.m		1704.24	
e)	Additional for Shuttering and Scafolding on a, b or c for wall and piers etc, upto 12" (300 mm) in thickness	Cu.m		3389.76	
f)	Additional for Shuttering and Scafolding on a, b or c for wall and piers etc, 12" to 18" in thickness	Cu.m		2712.00	
g)	Additional for Shuttering and Scafolding on a, b or c for wall and piers etc, 18" to 24" in thickness	Cu.m		1936.80	
h)	Additional for Shuttering and Scafolding on a, b or c for wall and piers etc, upto 24" to 36" in thickness	Cu.m		3107.50	
i)	Additional for Shuttering and Scafolding on a, b or c for pillars and columns of any shape	Cu.m		5083.20	
j)	Additional for Shuttering and Scafolding on a, b or c for beams, lintels and cantilevers of required shape	Cu.m		4622.40	
k)	Extra for Additional for Shuttering and Scafolding on	Cu.m		5044.80	
l)	Additional for Shuttering and Scafolding on a, b or c for slabs from 6" upto 9" in thickness	Cu.m		3722.88	
m)	Additional for Shuttering and Scafolding on a, b or c for slabs above 9" in thickness	Cu.m		1504.80	
n)	Extra for First Floor	Cu.m		10.00%	
o)	Extra for Every Additional Floor after First Floor			7.50%	
5-27(a)	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm) and down gauge in precast shelves coping, cornices, eave boards, hood, fencing posts and manhole covers etc. including formwork & its removal, compacting and curing in ground floor.	Cu.m	3156.60	21346.93	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Extra for first floor	Cu.m	315.66	689.82	
c)	Extra for every additional floor above first floor	Cu.m	236.75	517.37	
5-28	Providing and fixing precast cement concrete jali or louvers upto 2" (50mm) thick in required shape including formwork and its removal, compacting and curing.				
a)	1 : 2	Sq.m	1120.81	1894.11	
b)	1 : 3	Sq.m	1120.81	1690.22	
c)	1 : 4	Sq.m	1120.81	1590.64	
5-29	Providing and laying light weight concrete using 1 cement 6 cinder or similar material having weight not more than 650 kg/cubic meter including air-entraining agents, formwork, its removal, compacting and curing.	Cu.m	4018.80	19573.73	
5-30	Extra for providing and using cement other than ordinary portland cement.				
a)	Sulphate resisting cement	Ton		0.00	
b)	High alumina cement	Ton		0.00	
c)	Rapid hardening cement	Ton		0.00	
5-31-1	Providing and using any approved accelerating agent in cement concrete.	Kg.		678.00	
5-32-1	Providing and using in concrete any approved 3rd Generation retarding agent.	Litre		501.60	
5-33-1	Providing and using in concrete any approved wetting agent.	Kg.		726.00	
5-34	Providing and using concrete additives and Chemical.				
a)	Pudlo or similar	Kg.		198.00	
b)	Pucca kam or similar	Kg.			
5-35-1	Providing and applying two coats of hot bitumen (maxphalt 80/100 or equivalent) using 1.22 kg. per sq.metre for first coat and 1.0 kg. per Sq.m. for 2nd coat including cleaning the surface, heating and spraying the asphalt on concrete faces.	Sq.m	165.66	555.77	
5-36	Forming expansion joints with cork sheet including one coat of bitumen and preparation of surface.				
a)	1/2" (12.5 mm) thick	Sq.m	288.60	3961.80	
b)	3/4" (19 mm) thick	Sq.m	288.60	4801.80	
c)	1" (25 mm) thick	Sq.m	288.60	6001.80	
d)	1-1/2" (37.5 mm) thick	Sq.m	288.60	8401.80	
e)	2" (50 mm) thick	Sq.m	288.60	12001.80	
f)	G.I. corrugated sheet of any gauge and thickness	Sq.m	288.60	654.00	
5-37-1	Providing and laying joint sealing compound.	Litre	427.20	1123.20	
5-38	Providing and fixing P.V.C. ribbed waterstop in vertical or horizontal expansion joints including cutting or jointing.				
a)	P.V.C. ribbed water stop 4.5" (114 mm) wide	R.M	164.04	584.04	
b)	P.V.C. ribbed water stop 6" (150 mm) wide	R.M	164.04	836.04	
c)	P.V.C. ribbed water stop 9" (225 mm) wide	R.M	164.04	1112.04	
5-39-1	Drilling and grouting holes upto 3" (75 mm) dia in existing concrete for reinforcement bars.	R.M	316.32	502.85	
5-40-1	Grouting base plates, rails, anchor bolts foundation bolts and anchor frames of guide rails etc.	Sq.m	984.00	1995.21	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
5-41-1	Welding (electric) reinforcement with existing bars - joint length 2" to 3" (50mm to 75mm).	Each	24.00	204.58	
5-42-1	Nicking hard cement concrete surface	Sq.m	112.74		
5-43(a)	Providing, fabricating and laying mild steel Grade 36 (Plain bar) reinforcement for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or M.S. chairs for binding and holding the reinforcement in position is inclusive upto 15 ft (5m) height.	Ton	14584.80	292822.80	
b)	Extra on item 5-43 (a) for overhead tanks at a height of 30 ft. (10m)	Ton	4699.20		
c)	Extra on item 5-43 (b) for every additional height of 3 ft. (1 m) or part thereof above 30 ft. (10 m) upto 50 ft. (15 m) height	Ton	3417.60		
d)	Extra on item 5-43(c) for every additional height of 3 ft. (1 m) or part thereof above 50 ft.(15 m) height	Ton	1708.80		
e)	Deduct for every lesser height of 3 ft. (1 m) or part thereof below 30 ft. (10 m) height on item No.5-43(b)	Ton	3417.60		
f)	Extra for first floor on Item No.5-43(a)	Ton	4272.00		
g)	Extra for every additional floor above first floor on item No.5-43(f)	Ton	2563.20		
5-44(a)	Providing, fabricating and laying deformed Grade 40 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 15 ft. (5m) height	Ton	14584.80	317314.80	
b)	Extra on item 5-44 (a) for overhead tanks at a height of 30 ft. (10m)	Ton	4699.20		
c)	Extra on item 5-44 (b) for every additional height of 3 ft. (1 m) or part thereof above 30 ft. (10 m) upto 50 ft. (15 m) height	Ton	3417.60		
d)	Extra on item 5-44(c) for every additional height of 3 ft. (1 m) or part thereof above 50 ft.(15 m) height	Ton	1708.80		
e)	Deduct for every lesser height of 3 ft. (1 m) or part thereof below 30 ft. (10m) height on item No.5-44(b)	Ton	3417.60		
f)	Extra for first floor on Item No.5-44(a)	Ton	4272.00		
g)	Extra for every additional floor above first floor on item No.5-44(f)	Ton	2563.20		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
5-45	Providing and laying concrete using foaming agent similar and of equal quality to foamolight. The proportions, mixing, placing and curing shall be in accordance with the manufacturer's recommendations.				
a)	Dry density 320-400 kg/Cum. with cement & 2.90 pint foamolight and compressive strength 0.45N/mm2.	Cu.m	4189.20	18767.15	
b)					
i)	Dry density 480-560 kg/Cum. with 1 cement : 1 sand, 3.10 pint. foamolight and compressive strength 0.75N/mm2	Cu.m	4189.20	16130.18	
ii)	Dry density 640-720 kg/Cum. with 1 cement : 1 sand, 3.75 pint. foamolight and compressive strength 1.25N/mm2	Cu.m	4189.20	19348.74	
iii)	Dry density 800-880 kg/Cum. with 1 cement : 1 sand, 4.20 pint. foamolight and compressive strength 2.75N/mm2	Cu.m	4189.20	22506.41	
c)					
i)	Dry density 480-560 kg/Cum. with 1 cement : 2 sand, 3.10 pint. foamolight and compressive strength 0.50N/mm2	Cu.m	4189.20	13269.10	
ii)	Dry density 640-720 kg/Cum. with 1 cement : 2 sand, 3.75 pint. foamolight and compressive strength 0.60N/mm2	Cu.m	4189.20	15632.63	
iii)	Dry density 800-880 kg/Cum. with 1 cement : 2 sand, 4.20 pint. foamolight and compressive strength 0.60N/mm2	Cu.m	4189.20	17902.37	
iv)	Dry density 960-1120 kg/Cum. with 1 cement : 2 sand, 4.40 pint. foamolight and compressive strength 1.55N/mm2	Cu.m	4189.20	20653.83	
v)	Dry density 1200-1360 kg/Cum. with 1 cement : 2 sand, 4.80 pint. foamolight and compressive strength 3.30N/mm2	Cu.m			
d)					
i)	Dry density 800-880 kg/Cum. with 1 cement : 3 sand, 4.20 pint. foamolight and compressive strength 0.55N/mm2	Cu.m	4189.20	15600.35	
ii)	Dry density 960-1120 kg/Cum. with 1 cement : 3 sand, 4.40 pint. foamolight and compressive strength 1.40N/mm2	Cu.m	4189.20	17792.75	
iii)	Dry density 1200-1360 kg/Cum. with 1 cement : 3 sand, 4.80 pint. Foamolight and compressive strength 2.50N/mm2	Cu.m	4189.20	20472.35	
5-46	Providing and laying plum concrete using approved coarse sand and crushed aggregate 1-1/2"(38mm) & down gauge with 20% stones including levelling, compacting & curing.				
a)	1 : 2 : 4	Cu.m	4907.64	17515.90	
b)	1 : 3 : 6	Cu.m	4907.64	15211.03	
c)	1 : 4 : 8	Cu.m	4907.64	13509.07	
5-47	Providing and laying plum concrete using approved coarse sand and crushed aggregate 1-1/2" (38 mm) & down gauge with 30% boulders including levelling, compacting and curing.				
a)	1 : 2 : 4	Cu.m	4907.64	16390.79	
b)	1 : 3 : 6	Cu.m	4907.64	14374.03	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
c)	1 : 4 : 8	Cu.m	4907.64	12884.82	
5-48	Providing and laying plum concrete using approved coarse sand and crushed aggregate 1-1/2" (38 mm) & down gauge with 40% boulders including levelling, compacting and curing.				
a)	1 : 2 : 4	Cu.m	4907.64	15212.94	
b)	1 : 3 : 6	Cu.m	4907.64	13484.29	
c)	1 : 4 : 8	Cu.m	4907.64	12207.82	
5-49	Providing and laying 1:2:4 cement concrete using approved coarse sand and crushed aggregate 3/4" (19mm.) and down gauge in plinth band, door band and roof band of required shape or section including formwork and its removal, compacting and curing in basement and ground floor but excluding the cost of reinforcement.				
a)	Plinth band	Cu.m	3156.60	20538.84	
b)	Door band	Cu.m	3630.09	21012.33	
c)	Roof band	Cu.m	3630.09	21549.45	
d)	Extra for Item 5-49 b & c above for first floor	Cu.m	653.42	1190.54	
e)	Extra for Item 5-49 b & c for every additional floor above first floor	Cu.m	326.71	595.27	
5-50	Providing and filling Asphalt bitumen mixed with sand at 90 lbs./cu.ft (1441.5kg/Cum) of sand in expansion joints of roof slab.	Cu.m	346.89	100945.81	
5-51	Providing and fixing 4.89 kg/sq.m. aluminium sheet covering of approved shape and design to expansion joints of roof slabs with slotted holes with wooden gutties and screws.	Sq.m	346.89	4232.49	
5-52	Providing and fixing 4.89 kg/sq.m. aluminium sheet covering of approved shape and design to expansion joints in walls and columns including providing clamps and fixing with screws and rawl plugs or wooden gutties including making slotted holes.	Sq.m	399.78	3067.38	
5-53	Providing and fixing 4.89 kg/sq.m. crimped copper sheet covering strips in vertical joints including punching slotted holes and fixing with wooden gutties or rawl plugs and screws.	Sq.m	399.78	8535.78	
5-54	Providing Super Placticizer Concrete Additives	Litre		330.00	
5-55	Providing and fixing aluminium angle in corners with rawl plugs and aluminium screws.		103.73	417.86	
5-56	Providing and fixing Elastomeric Bearing Pads (According to Size and Thickness)	Cu.cm			
a)	Local		2.14	8.14	
b)	Imported		2.14	21.34	
5-57	Providing and laying Steel or Metal Bearing Devices	Kg.	213.60	963.60	
5-58	Providing and Fixing Premoulded Joint Filler 12 Mm Thick With Bitumastic Joint Seal	Sq.m	438.60	1638.60	
5-59	Providing and Fixing Neoprene Rubber Joint Filler 12 Mm Thick With Bitumastic Joint Seal	Sq.m	331.80	1771.80	
5-60	Providing and Fixing Steel Expansion Joints (Local)	Kg	64.08	406.08	
5-61	Providing and Fixing Expansion Joint With Two Extruded Aluminium Alloy Sections For 50mm Movement (USA/EU Make)	Kg	2563.20	7963.20	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
5-62	Providing and Fixing Expansion Joint With Cast Aluminium Alloy Triangular Teeth For 110mm Movement (USA/EU Make)	R.M	2136.00	12936.00	
5-63	Providing and Fixing Expansion Joint With Cast Aluminium Alloy Cantilever Teeth For 300mm Movement (USA/EU Make)	R.M	2990.40	36590.40	
5-64	Providing and Fixing Expansion Joint Monobloc Type For 65mm Movement (USA/EU Make)	R.M	1281.60	8481.60	
5-65(a)	Providing, fabricating and laying deformed Grade 60 steel reinforcement (deformed bar) for all kinds of R.C.C work in foundation, plinth and ground floor including the cost of straightening, removal of rust, cutting, bending, binding, wastage and providing such over-laps as are not shown on the drawings. The cost of binding wire and cement concrete spacer blocks or chairs for binding and holding the reinforcement in position is inclusive upto 15 ft. (5m) height	Ton	14584.80	317314.80	
b)	Extra on item 5-65 (a) for overhead tanks at a height of 30 ft. (10m)	Ton	4699.20		
c)	Extra on item 5-65 (b) for every additional height of 3 ft. (1 m) or part thereof above 30 ft. (10 m) upto 50 ft. (15 m) height	Ton	3417.60		
d)	Extra on item 5-65(c) for every additional height of 3 ft. (1 m) or part thereof above 50 ft.(15 m) height	Ton	1708.80		
e)	Deduct for every lesser height of 3 ft. (1 m) or part thereof below 30 ft. (10m) height on item No.5-65(b)	Ton	3417.60		
f)	Extra for first floor on Item No.5-65(a)	Ton	4272.00		
g)	Extra for every additional floor above first floor on item No.5-65(f)	Ton	2563.20		
5-66(a)	Providing and Fixing 1.5'' x 3/4 '' Expansion Joint with one Component Polyurethane Fuel Resistant Sealant including 40 mm Baker rod and One coat of primer but without Aluminium or Steel cover.	R.M	363.60	2043.60	
b)	Providing and Fixing 2.0'' x 1 '' Expansion Joint with one Component Polyurethane Fuel Resistant Sealant including 50 mm Baker rod and One coat of primer but without Aluminium or Steel cover.	R.M	363.60	2283.60	

SECTION – 6

PRESTRESSED CONCRETE

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

2. THE PRESTRESSED CONCRETE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH SPECIFICATIONS LAID DOWN BY FREYSSINET OR SIMILAR SYSTEM

Sr. No.		Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
				Labour	Composite	
6-1-1		Providing and pre-stressing 1/2" (12.5 mm) dia. wire strand including cost of cable, Anchorage cone sets, corrugated steel sheath duct, PE grout vents, PE grout tube, PVC wraping tape, steel binding wire, cement grout and grout additive as per specifications including all arrangements, supply of recorded data in triplicate as per direction of the Engineer in charge	Ton	16302.86	445973.42	
6-2-1		Launching and placing of Precast/ Pre-stressed Girder including all arrangements as per direction of the Engineer in charge	Ton	600.00	1110.00	
6-3-1		Supplying, fabricating and fixing formwork in prestressed concrete beams of all sections including removal of formwork (Wooden, Steel or	Sq. m.	581.59	1218.82	
6-4		Providing and laying reinforced cement concrete using crushed aggregate 19mm and down gauge in the prestressed concrete work, compacting with vibrator and curing but excluding the cost of reinforcement and shuttering.				
	A	1:1:2	Cu. m.	4926.60	27339.07	
	B	1:1.5:3	Cu. m.	4926.60	21888.40	
	C	1:2:4	Cu. m.	4926.60	18728.04	
6-5	A	Making good requisite anchorage recesses with cement concrete 1:1:2 using crushed aggregate of approved size including formwork and its removal and cutting.	One Job	34.98	368.97	
6-6		Stacking post tensioned precast beams and slabs upto lead of 500 ft (150 m) including loading and unloading				
	A	Upto 50 ft. (15.25 m) length	Cu. m.	801.00	1429.02	
	B	Above 50 ft. (15.25 m) length	Cu. m.	1014.60	1646.89	
6-7		Hoisting post tensioned precast beams and slabs by mechanical means upto lift of 18 ft (5.5 m) above ground level and placing in position				
	A	Upto 50 ft. (15.25 m) length	Cu. m.	534.00	1156.68	
	B	Extra for every 12 ft. (3.75m) additional lift or part thereof on item 6- 7(a) above	Cu. m.	427.20	652.20	
	C	Above 50 ft. (15.25 m) length	Cu. m.	640.80	2183.62	
	D	Extra for every 12 ft. (3.75m) additional lift or part thereof on item 6-7(c) above	Cu. m.	534.00	1141.50	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
6-8	Providing and laying in position ready mixed concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified strength for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per mix design to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge.				
A	3000 Psi (28 Cylinder Compressive Strenght)	Cu. m.	5140.66	24054.90	
B	4000 Psi (28 Cylinder Compressive Strenght)	Cu. m.	5140.66	26794.84	
C	5000 Psi (28 Cylinder Compressive Strenght)	Cu. m.	5140.66	32517.75	
6-9	load testing (initial) of piles including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification and				
A	up to 50 tonne capacity pile	Job		300000.00	
B	50 to 100 tonne capacity pile	Job		336000.00	
C	100 to 150 tonne capacity pile	Job		408000.00	
D	150 to 200 tonne capacity pile	Job		456000.00	

SECTION – 7

PILE FOUNDATION CONCRETE

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

2. RATES FOR DRILLING FOR DIFFERENT SIZES OF PILES SHALL BE THE SAME AS FOR TUBEWELL GIVEN IN SECTION 27

Sr. No.		Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
				Labour	Composite	
7-1	A	Providing and laying concrete for bored cast in situ piles by tremie pipe or skip bucket using Coarse sand and Crushed Aggregate 3/4" (19mm) & down gauge in dense homogeneous concrete nominal mix 1:1.33:2.66 having cube crushing strength of 34.5 N/mm2 at 28 days. The concrete in the piles is to be measured by multiplying the cross-sectional area of the pile by the length of pile as cast, from the head to the butt of the shoe. Reinforcement & boring of pile is to be measured for payment separately.	R. M.	4861.44	26519.52	
	B	Extra if 1 : 1 : 2 mix is used in item 7-1(a) above	Cu. m.		4560.79	
	C	Deduct if 1 : 2 : 4 mix is used in item 7-1(a) above	Cu. m.		-5489.06	
7-2-1		Cutting of top of RCC piles of any size including chiseling, dismantling, straightening the steel and disposal	Cu. m.	4229.28	8335.08	
7-3-1		Providing and laying for cast in situ RCC piles Deformed G-40 steel reinforcement bars with and including the cost of straightening, removing rust, cutting, bending, binding, welding, wastage, overlaps as are not shown on the drawings. The cost of binding wire and holding the reinforcement in position is inclusive.	Tonne	14119.20	370944.42	
7-4-1		Providing and laying for cast in situ RCC piles intergraded deformed reinforcement G-60 with and including the cost of straightening, removing rust, cutting, bending, binding, welding, wastage, overlaps as are not shown on the drawings. The cost of binding wire and holding the reinforcement in position is inclusive.	Tonne	14119.20	384162.19	
7-5-1		Providing and laying for pile caps, grade beams and precast piles mild reinforcement bars with and including the cost of straightening, removing rust, cutting, bending, binding, welding, wastage, overlaps as are not shown on the drawings. The cost of binding wire and precast 1:2:4 cement concrete or M.S. chairs for binding and holding the reinforcement in position is inclusive.	Tonne	14584.80	291562.80	
7-6-1		Providing and laying for pile caps, grade beams, and precast pile integrated deformed bars with and including the cost of straightening, removing rust, cutting, bending, binding, wastage, overlaps as are not shown on the drawings. The cost of binding wire and precast 1:2:4 cement concrete or M.S. chairs for binding and holding the reinforcement in position is inclusive.	Tonne	14584.80	317314.80	
7-7		Providing and laying cement concrete using Coarse Sand & Crushed Aggregate 3/4" (19 mm) and down gauge in pile caps, tee beams, and grade beams in dense homogeneous concrete mix including formwork and its removal, compacting, curing, and bailing out or pumping out sub-soil water during concreting, but excluding the cost of reinforcement.				
	A	1:1:2	Cu. m.	3156.60	29475.66	

Sr. No.		Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
				Labour	Composite	
	B	1:1.5:3	Cu. m.	3156.60	24328.09	
	C	1:2:4	Cu. m.	3156.60	21313.05	
7-8		Boring for piling in any kind of soil including extraction of casing pipe and or using bentonite as applicable in all kinds of soil except shingle, gravel or rock.				
	A	From ground level upto 250 ft (76 m) below ground level				
	i	15" to 18" (375 mm to 450 mm) i/d	R. M.		13006.21	
	ii	20" to 30" (500 mm to 750 mm) i/d	R. M.		14306.83	
	iii	32" to 40" (800 to 1000 mm) i/d	R. M.		19509.31	
	iv	46" to 60" (1200 to 1500 mm) i/d	R. M.		21460.25	
	B	Exceeding 250 ft (76 m) below ground level				
	i	15" to 18" (375 mm to 450 mm) i/d	R. M.		16908.07	
	ii	20" to 30" (500 mm to 750 mm) i/d	R. M.		18598.88	
	iii	32" to 40" (800 to 1000 mm) i/d	R. M.		25362.11	
	iv	46" to 60" (1200 to 1500 mm) i/d	R. M.		27898.32	
7-9		Boring by percussion, direct rotary or reverse rotary method for piling in any kind of soil including extraction of casing pipe and or using bentonite as applicable in shingle, gravel or rock.				
	A	From ground level upto 250 ft (76 m) below ground level				
	i	15" to 18" (375 mm to 450 mm) i/d	R. M.		22896.71	
	ii	20" to 30" (500 mm to 750 mm) i/d	R. M.		25186.38	
	iii	32" to 40" (800 to 1000 mm) i/d	R. M.		34345.06	
	iv	46" to 60" (1200 to 1500 mm) i/d	R. M.		37779.56	
	B	Exceeding 250 ft (76 m) below ground level				
	i	15" to 18" (375 mm to 450 mm) i/d	R. M.		29765.72	
	ii	20" to 30" (500 mm to 750 mm) i/d	R. M.		32742.29	
	iii	32" to 40" (800 to 1000 mm) i/d	R. M.		44648.58	
	iv	46" to 60" (1200 to 1500 mm) i/d	R. M.		49113.43	
	C	Extra of Steel Casing of Shaft	Tonne		306000.00	
7-10-1		Sub-soil boring of required dia in all kinds of soil except rock to required depth complete 4-8 inch inner dia.	R. M.		17970.00	
7-11-1		Sub-soil boring of required dia in rock of all sorts to required depth complete.	R. M.		28716.00	

SECTION – 8

DAMP PROOF COURSE AND WATERPROOFING

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
8-1	Providing and laying 1" (25mm) thick damp proof course with 1:2:4 cement concrete using Coarse Sand and crushed aggregate 1/2" (13mm) and down gauge mixed with any approved water proofing agent including compacting, curing, formwork and its removal cost of water proofing agent will be paid separately.	Sq.m	92.52	428.46	
8-2 a)	Same as 8-1(a) above but with 1-1/2" (37.5 mm) thick damp proof course.	Sq.m	138.78	642.69	
8-3 a)	Same as 8-1(a) but 2" (50 mm) thick damp proof course	Sq.m	185.04	856.93	
8-4	Providing and laying 1" (25.4 mm) thick damp proof course with 1:2:4 cement concrete Coarse Sand and crushed aggregate 1/2" (13mm) and down gauge including applying a coat of hot bitumen 80/100 or equivalent using 1.71 Kg per sq.m. and laying single layer of polythene sheet 0.13 mm thick (500 gauge) on damp proof course, including cleaning surface and spraying	Sq.m	155.65	1299.72	
8-5 a)	Same as 8-4(a) above but with 1-1/2" (37.5 mm) thick damp proof course	Sq.m	233.47	1949.57	
8-6 a)	Same as 8-4(a) above but with 2" (50 mm) thick damp proof course	Sq.m	311.30	2599.43	
8-7	Providing and laying damp proof course of bitumen (hot application) at the rate of 1.25 Kg. of bitumen per Sq.m. on the smooth finished plinth surface made of 1/2" (13mm) thick cement plaster 1:4 covered with a coat of hot bitumen at the rate of 1 Kg. per Sq.m. of surface area including blinding the top surface with coarse sand using 0.012 Cu.m. per Sq.m.	Sq.m	461.11	1164.53	
8-8	Providing damp proof course on vertical surface with 3/4" (19 mm) thick cement plaster 1:3 mixed with any approved water proofing agent including curing and providing a layer of polythene sheet 0.13mm thick (500 gauge), but excluding the cost of water proofing agent.	Sq.m	391.13	933.51	
8-9 a)	Providing a coat of bitumen emulsion at 0.50 kg per sq.m. on walls and floors in ground floor.	Sq.m	288.60	507.00	
b)	Extra per one storey height if the building is more than one storey height.	Sq.m		53.40	
8-10 a)	Providing and laying on ground floor roof plastic bitumen No.3 at the rate of 1.45 kg with 0.176 cu.ft.(0.005 cu.m) of coarse sand in first coat and 1.25 kg. with 0.176 cu.ft (0.005 cu.m). of coarse sand in second coat over a coat of light diesel oil priming at 0.75 kg per sq.m. including light ramming.	Sq.m	148.92	1751.60	
b)	Extra per storey height if the building is more than one storey height	Sq.m		53.40	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
8-11 a)	Providing and laying on ground floor roof ruberoid 3 ply reelia roofing including asphalt felt No.7 as underlay each treated with ruberoid compound including providing, flashing and finished with washed gravel.	Sq.m	214.28	4689.49	
b)	Extra per one storey height if the building is more than one storey height.	Sq.m		49.13	
8-12 a)	Providing and laying heated asphalt on ground floor roof at the rate of 1.95 kg per sq.m. finished with washed gravel 3/8" (9.5 mm) and down gauge at 0.0295 cu.ft./sq.ft. (0.009 cu.m./sq.m) including ramming and rounding of corners with cement mortar.	Sq.m	409.20	909.17	
b)	Extra per one storey height if the building is more than one storey height.	Sq.m		49.13	
8-13 a)	Same as 8-12(a) but heated asphalt at the rate of 0.90 kg. per sq.m	Sq.m	337.80	572.52	
b)	Extra per one storey height if the building is more than one storey height.	Sq.m		49.13	
8-14 a)	Providing and laying on ground floor roofing felt 2 ply over a tack coat of bitumen at 1.45 kg per sq.m. and sealed with bitumen compound at the rate of 1.45 kg per sq.m. and blended with washed gravel 9.5mm and down gauge at the rate of 0.009 cu.m. per sq.m. including ramming.	Sq.m	423.24	1192.20	
b)	Extra per one storey height if the building is more than one storey height.	Sq.m		53.40	
8-15 a)	Providing and laying water proof matting 3.2 mm thick on external faces of walls below ground level, under raft, basement floor, under floors, plinth and on ground floor roof top with adhesive No.70 at the rate of 0.48 Kg per Sq.m. diluted with 13% of solvent like kerosine oil including the cost of overlaps, cleaning & scraping the surface by wire brushes before applying the adhesive and laying jutoid.	Sq.m	35.60	376.87	
b)	Extra for every additional layer of jutoid water proof matting.	Sq.m	17.80	162.63	
c)	Extra per one storey height if the building is more than one storey height.	Sq.m		74.76	
8-16 a)	Providing and laying water proof matting 1.6 mm to 2.1 mm thick on top of flat or sloping roofs of ground floor with adhesive No. 70 at the rate of 0.48 Kg/Sq.m. diluted with 13% of solvent like kerosine oil including the cost of overlaps, cleaning and scraping the surface with wire brushes before applying the adhesive and laying jutoid.	Sq.m	35.60	680.47	
b)	Extra for every additional layer of jutoid water proof matting.	Sq.m	17.80	466.23	
c)	Extra per one storey height if the building is more than one storey height.	Sq.m		74.76	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
8-17 a)	Providing and laying water proof matting 1.6 mm to 2.1 mm thick over corrugated roof (ground floor roof) with adhesive No.70 at the rate of 1.0 kg. per sq.m. diluted with 13% of solvent like kerosine oil including the cost of overlaps cleaning and scraping the surface with wire brushes before aplying the adhesive and laying jutoid.	Sq.m	35.60	770.02	
b)	Extra for every additional layer of jutoid water proof matting.	Sq.m	17.80	466.23	
c)	Extra per one storey height if the building is more than one storey height.	Sq.m		74.76	
8-18 a)	Providing and laying 1:2:4 cement concrete using Coarse Sand and crushed aggregate 3/4" (19mm) and down gauge in terraces 3" (75 mm) average thickness to required slope in panels including formwork, consolidation, finishing, curing, painting the surface with plastic bitumen No.4 at the rate of 0.73 Kg per Sq.m. blinded with sand at the rate of 0.006 Cu.m. per Sq.m. on ground floor roof.	Sq.m	419.20	1531.79	
b)	Extra per one storey height if the building is more than one storey height.	Sq.m		256.32	
8-19	Providing and laying polythene sheet 0.13 mm thick under floors for water proofing laid as per instructions of the Engineer in ground floor.				
a)	Single layer	Sq.m	55.54	451.54	
b)	Double layer	Sq.m	111.07	903.07	
8-20	Providing and laying polythene sheet 0.13 mm thick on roof for water proofing laid as per instructions of the Engineer in ground floor.				
a)	Single layer	Sq.m	55.54	451.54	
b)	Double layer	Sq.m	111.07	903.07	

SECTION – 9

CEMENT CONCRETE BLOCK MASORY

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
9-1	Providing and laying 1:4:8 cement concrete block masonry using Coarse Sand and Approved crushed aggregate 3/4" (19mm) & down gauge in foundation, basement and plinth including scaffolding, raking out joints and curing.				
a)	4" (100 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 4	Cu.m	6036.98	15752.73	
ii)	Cement sand mortar 1 : 5	Cu.m	6036.98	15506.70	
iii)	Cement =Sand mortar 1 : 6	Cu.m	6036.98	15330.96	
b)	6" (150 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 4	Cu.m	5136.56	14852.32	
ii)	Cement sand mortar 1 : 5	Cu.m	5136.56	14606.28	
iii)	Cement sand mortar 1 : 6	Cu.m	5136.56	14430.54	
c)	8" (200 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 4	Cu.m	4307.46	14023.21	
ii)	Cement sand mortar 1 : 5	Cu.m	4307.46	13777.18	
iii)	Cement sand mortar 1 : 6	Cu.m	4307.46	13601.44	
d)	12" (300 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 4	Cu.m	3457.62	13173.37	
ii)	Cement sand mortar 1 : 5	Cu.m	3457.62	12927.33	
iii)	Cement sand mortar 1 : 6	Cu.m	3457.62	12751.59	
9-2	Same as in item 9-1 but in 1:3:6 cement concrete block masonry.				
a)	4" (100 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	6036.98	18476.32	
ii)	Cement sand mortar 1 : 4	Cu.m	6036.98	18054.55	
iii)	Cement sand mortar 1 : 5	Cu.m	6036.98	17808.51	
iv)	Cement sand mortar 1 : 6	Cu.m	6036.98	17632.77	
b)	6" (150 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	5136.56	17575.91	
ii)	Cement sand mortar 1 : 4	Cu.m	5136.56	17154.13	
iii)	Cement sand mortar 1 : 5	Cu.m	5136.56	16908.09	
iv)	Cement sand mortar 1 : 6	Cu.m	5136.56	16732.35	
c)	8" (200 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	4307.46	16746.80	
ii)	Cement sand mortar 1 : 4	Cu.m	4307.46	16325.03	
iii)	Cement sand mortar 1 : 5	Cu.m	4307.46	16078.99	
iv)	Cement sand mortar 1 : 6	Cu.m	4307.46	15903.25	
d)	12" (300 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	3457.62	15896.96	
ii)	Cement sand mortar 1 : 4	Cu.m	3457.62	15475.18	
iii)	Cement sand mortar 1 : 5	Cu.m	3457.62	15229.15	
iv)	Cement sand mortar 1 : 6	Cu.m	3457.62	15053.41	
9-3	Same as in item 9-1 but in 1:2:4 cement concrete block masonry.				
a)	4" (100 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	6036.98	21574.64	
ii)	Cement sand mortar 1 : 3	Cu.m	6036.98	20742.84	
iii)	Cement sand mortar 1 : 4	Cu.m	6036.98	20321.07	
iv)	Cement sand mortar 1 : 5	Cu.m	6036.98	20075.03	
v)	Cement sand mortar 1 : 6	Cu.m	6036.98	19899.29	
b)	6" (150 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	5136.56	20674.22	
ii)	Cement sand mortar 1 : 3	Cu.m	5136.56	19842.43	
iii)	Cement sand mortar 1 : 4	Cu.m	5136.56	19420.65	
iv)	Cement sand mortar 1 : 5	Cu.m	5136.56	19174.62	
v)	Cement sand mortar 1 : 6	Cu.m	5136.56	18998.88	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
c)	8" (200 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	4307.46	19845.12	
ii)	Cement sand mortar 1 : 3	Cu.m	4307.46	19013.32	
iii)	Cement sand mortar 1 : 4	Cu.m	4307.46	18591.55	
iv)	Cement sand mortar 1 : 5	Cu.m	4307.46	18345.51	
v)	Cement sand mortar 1 : 6	Cu.m	4307.46	18169.77	
d)	12" (300 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	3457.62	18995.28	
ii)	Cement sand mortar 1 : 3	Cu.m	3457.62	18163.48	
iii)	Cement sand mortar 1 : 4	Cu.m	3457.62	17741.70	
iv)	Cement sand mortar 1 : 5	Cu.m	3457.62	17495.67	
v)	Cement sand mortar 1 : 6	Cu.m	3457.62	17319.93	
9-4-1	Extra for every 6.5 ft (2 m.) or part thereof in foundation and basement masonry deeper than 6.5 ft (2 m.)	Cu.m	381.28		
9-5-1	Extra for every 5 ft (1.5 m) or part thereof in foundation and basement masonry deeper than 5 ft (1.5 m).	Cu.m	504.63		
9-6	Providing and laying 1:4:8 cement concrete block masonry using Coarse Sand and Approved crushed aggregate 3/4" (19mm) and down gauge in ground floor super-structure including scaffolding, raking out joints and curing.				
a)	4" (100 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 4	Cu.m	6753.98	16469.73	
ii)	Cement sand mortar 1 : 5	Cu.m	6753.98	16223.70	
iii)	Cement sand mortar 1 : 6	Cu.m	6753.98	16047.96	
b)	6" (150 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 4	Cu.m	5853.56	15569.32	
ii)	Cement sand mortar 1 : 5	Cu.m	5853.56	15323.28	
iii)	Cement sand mortar 1 : 6	Cu.m	5853.56	15147.54	
c)	8" (200 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 4	Cu.m	4979.46	14695.21	
ii)	Cement sand mortar 1 : 5	Cu.m	4979.46	14449.18	
iii)	Cement sand mortar 1 : 6	Cu.m	4979.46	14273.44	
d)	12" (300 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 4	Cu.m	3457.62	13173.37	
ii)	Cement sand mortar 1 : 5	Cu.m	3457.62	12927.33	
iii)	Cement sand mortar 1 : 6	Cu.m	3457.62	12751.59	
9-7	Same as item 9-6 but in 1:3:6 cement concrete block masonry.	Cu.m			
a)	4" (100 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	6753.98	19193.32	
ii)	Cement sand mortar 1 : 4	Cu.m	6753.98	18771.55	
iii)	Cement sand mortar 1 : 5	Cu.m	6753.98	18525.51	
iv)	Cement sand mortar 1 : 6	Cu.m	6753.98	18349.77	
b)	6" (150 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	5853.56	18292.91	
ii)	Cement sand mortar 1 : 4	Cu.m	5853.56	17871.13	
iii)	Cement sand mortar 1 : 5	Cu.m	5853.56	17625.09	
iv)	Cement sand mortar 1 : 6	Cu.m	5853.56	17449.35	
c)	8" (200 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	4979.46	17418.80	
ii)	Cement sand mortar 1 : 4	Cu.m	4979.46	16997.03	
iii)	Cement sand mortar 1 : 5	Cu.m	4979.46	16750.99	
iv)	Cement sand mortar 1 : 6	Cu.m	4979.46	16575.25	
d)	12" (300 mm) thick solid block masonry				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
i)	Cement sand mortar 1 : 3	Cu.m	3457.62	15896.96	
ii)	Cement sand mortar 1 : 4	Cu.m	3457.62	15475.18	
iii)	Cement sand mortar 1 : 5	Cu.m	3457.62	15229.15	
iv)	Cement sand mortar 1 : 6	Cu.m	3457.62	15053.41	
9-8	Same as item 9-6 but in 1:2:4 cement concrete block masonry.				
a)	4" (100 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	6753.98	22291.64	
ii)	Cement sand mortar 1 : 3	Cu.m	6753.98	21459.84	
iii)	Cement sand mortar 1 : 4	Cu.m	6753.98	21038.07	
iv)	Cement sand mortar 1 : 5	Cu.m	6753.98	20792.03	
v)	Cement sand mortar 1 : 6	Cu.m	6753.98	20616.29	
b)	6" (150 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	5853.56	21391.22	
ii)	Cement sand mortar 1 : 3	Cu.m	5853.56	20559.43	
iii)	Cement sand mortar 1 : 4	Cu.m	5853.56	20137.65	
iv)	Cement sand mortar 1 : 5	Cu.m	5853.56	19891.62	
v)	Cement sand mortar 1 : 6	Cu.m	5853.56	19715.88	
c)	8" (200 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	4979.46	20517.12	
ii)	Cement sand mortar 1 : 3	Cu.m	4979.46	19685.32	
iii)	Cement sand mortar 1 : 4	Cu.m	4979.46	19263.55	
iv)	Cement sand mortar 1 : 5	Cu.m	4979.46	19017.51	
v)	Cement sand mortar 1 : 6	Cu.m	4979.46	18841.77	
d)	12" (300 mm) thick solid block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	3457.62	18995.28	
ii)	Cement sand mortar 1 : 3	Cu.m	3457.62	18163.48	
iii)	Cement sand mortar 1 : 4	Cu.m	3457.62	17741.70	
iv)	Cement sand mortar 1 : 5	Cu.m	3457.62	17495.67	
v)	Cement sand mortar 1 : 6	Cu.m	3457.62	17319.93	
9-9	Extra for masonry of any description in pillars and columns of any shape over the rate of respective item	%		10.83	
9-10-1	Extra for masonry of any description in arches, architrave coping and cornice of any shape over the rate of the respective item	%		14.15	
9-11-1	Extra for masonry of any description of bonding old and new masonry including making recesses in old masonry. The measurement will be made for the actual new masonry inserted in old masonry	Cu.m	5643.54		
9-12-1	Extra for work in first floor above ground floor.	Cu.m	1141.06		
9-13-1	Extra for work in every additional floor above first floor	Cu.m	916.78		
9-14-1	Extra for work in arches in first floor above ground floor.	Cu.m	1421.41		
9-15-1	Extra for work in arches in every additional floor above first floor.	Cu.m	1197.13		
9-16	Extra for cement concrete solid block masonry of any description in any floor or other than building for every 5 ft (1.5m) height or part thereof beyond 15 ft (4.5m)	Cu.m	847.52	955.98	

SECTION – 10

CEMENT CONCRETE HOLLOW BLOCK MASORY

1. RATES FOR ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

2. NO PAYMENT SHALL BE MADE FOR FORMING CAVITIES IN BLOCK AND NO DEDUCTION TO MADE FOR HOWLLOWNESS IN BLOCKS

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
10-1	Providing and laying 1:3:6 cement concrete block masonry using Coarse Sand and Approved crushed aggregate 1/2" (13mm) & down gauge including scaffolding, raking out joints and curing in basement.				
a)	4" (100 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	7546.23	15122.91	
ii)	Cement sand mortar 1 : 4	Cu.m	7546.23	14826.21	
iii)	Cement sand mortar 1 : 5	Cu.m	7546.23	14653.13	
iv)	Cement sand mortar 1 : 6	Cu.m	7546.23	14529.50	
b)	6" (150 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	6420.71	12244.17	
ii)	Cement sand mortar 1 : 4	Cu.m	6420.71	11989.85	
iii)	Cement sand mortar 1 : 5	Cu.m	6420.71	11841.50	
iv)	Cement sand mortar 1 : 6	Cu.m	6420.71	11735.54	
c)	8" (200 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	5384.33	12401.98	
ii)	Cement sand mortar 1 : 4	Cu.m	5384.33	12105.28	
iii)	Cement sand mortar 1 : 5	Cu.m	5384.33	11932.20	
iv)	Cement sand mortar 1 : 6	Cu.m	5384.33	11808.57	
d)	12" (300 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	4322.02	10709.30	
ii)	Cement sand mortar 1 : 4	Cu.m	4322.02	10327.82	
iii)	Cement sand mortar 1 : 5	Cu.m	4322.02	10105.30	
iv)	Cement sand mortar 1 : 6	Cu.m	4322.02	9946.35	
10-2	Same as item 9-17 but in 1:2:4 concrete hollow block masonry.				
a)	4" (100 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	7546.23	17050.72	
ii)	Cement sand mortar 1 : 3	Cu.m	7546.23	16465.58	
iii)	Cement sand mortar 1 : 4	Cu.m	7546.23	16168.87	
iv)	Cement sand mortar 1 : 5	Cu.m	7546.23	15995.80	
v)	Cement sand mortar 1 : 6	Cu.m	7546.23	15872.17	
b)	6" (150 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	6420.71	13752.72	
ii)	Cement sand mortar 1 : 3	Cu.m	6420.71	13251.17	
iii)	Cement sand mortar 1 : 4	Cu.m	6420.71	12996.86	
iv)	Cement sand mortar 1 : 5	Cu.m	6420.71	12848.50	
v)	Cement sand mortar 1 : 6	Cu.m	6420.71	12742.54	
c)	8" (200 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	5384.33	14209.91	
ii)	Cement sand mortar 1 : 3	Cu.m	5384.33	13624.77	
iii)	Cement sand mortar 1 : 4	Cu.m	5384.33	13328.07	
iv)	Cement sand mortar 1 : 5	Cu.m	5384.33	13154.99	
v)	Cement sand mortar 1 : 6	Cu.m	5384.33	13031.36	
d)	12" (300 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	4322.02	12468.62	
ii)	Cement sand mortar 1 : 3	Cu.m	4322.02	11716.30	
iii)	Cement sand mortar 1 : 4	Cu.m	4322.02	11334.83	
iv)	Cement sand mortar 1 : 5	Cu.m	4322.02	11112.30	
v)	Cement sand mortar 1 : 6	Cu.m	4322.02	10953.35	
10-3	Providing and laying 1:3:6 cement concrete hollow block masonry using Coarse Sand and Approved crushed aggregate 1/2" (12.7mm) thick and down gauge including scaffolding, raking out joints and curing in ground floor superstructure.				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
a)	4" (100 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	8442.48	15981.84	
ii)	Cement sand mortar 1 : 4	Cu.m	8442.48	15686.59	
iii)	Cement sand mortar 1 : 5	Cu.m	8442.48	15514.37	
iv)	Cement sand mortar 1 : 6	Cu.m	8442.48	15391.35	
b)	6" (150 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	7316.96	13111.74	
ii)	Cement sand mortar 1 : 4	Cu.m	7316.96	12858.67	
iii)	Cement sand mortar 1 : 5	Cu.m	7316.96	12711.05	
iv)	Cement sand mortar 1 : 6	Cu.m	7316.96	12605.60	
c)	8" (200 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	6224.33	13207.41	
ii)	Cement sand mortar 1 : 4	Cu.m	6224.33	12912.17	
iii)	Cement sand mortar 1 : 5	Cu.m	6224.33	12739.95	
iv)	Cement sand mortar 1 : 6	Cu.m	6224.33	12616.93	
d)	12" (300 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 3	Cu.m	4322.02	10677.84	
ii)	Cement sand mortar 1 : 4	Cu.m	4322.02	10298.24	
iii)	Cement sand mortar 1 : 5	Cu.m	4322.02	10076.81	
iv)	Cement sand mortar 1 : 6	Cu.m	4322.02	9918.64	
10-4	Same as item 9-19 but in 1:2:4 cement concrete hollow block masonry.				
a)	4" (100 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	8442.48	17900.15	
ii)	Cement sand mortar 1 : 3	Cu.m	8442.48	17317.89	
iii)	Cement sand mortar 1 : 4	Cu.m	8442.48	17022.65	
iv)	Cement sand mortar 1 : 5	Cu.m	8442.48	16850.42	
v)	Cement sand mortar 1 : 6	Cu.m	8442.48	16727.41	
b)	6" (150 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	7316.96	14648.97	
ii)	Cement sand mortar 1 : 3	Cu.m	7316.96	14147.42	
iii)	Cement sand mortar 1 : 4	Cu.m	7316.96	13893.11	
iv)	Cement sand mortar 1 : 5	Cu.m	7316.96	13744.75	
v)	Cement sand mortar 1 : 6	Cu.m	7316.96	13638.79	
c)	8" (200 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	4322.02	13147.61	
ii)	Cement sand mortar 1 : 3	Cu.m	4322.02	12562.47	
iii)	Cement sand mortar 1 : 4	Cu.m	4322.02	12265.76	
iv)	Cement sand mortar 1 : 5	Cu.m	4322.02	12092.68	
v)	Cement sand mortar 1 : 6	Cu.m	4322.02	11969.06	
d)	12" (300 mm) thick hollow block masonry				
i)	Cement sand mortar 1 : 2	Cu.m	4322.02	12468.62	
ii)	Cement sand mortar 1 : 3	Cu.m	4322.02	11716.30	
iii)	Cement sand mortar 1 : 4	Cu.m	4322.02	11334.83	
iv)	Cement sand mortar 1 : 5	Cu.m	4322.02	11112.30	
v)	Cement sand mortar 1 : 6	Cu.m	4322.02	10953.35	
10-5	Extra for hollow block masonry in first floor superstructure.	Cu.m	1358.91		
10-6	Extra for hollow block masonry in every additional floor above first floor.	Cu.m	1078.56		
10-7	Extra for cement concrete hollow block masonry of any description in any floor or other than building for every 5 ft (1.5m) height or part thereof beyond 15 ft (4.5m)	Cu.m	167.12		

SECTION – 11

BRICK WORK

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
11-1	Providing and laying sundried clay bricks set in mud mortar including scaffolding in foundation and substructure				
a)	Upto 4.5" (115 mm) nominal thick brick work	Cu.m	3208.80	9718.28	
b)	Above 4.5" (115mm) nominal thick brickwork	Cu.m	4963.20	11022.02	
11-2	Providing and laying first class solid burnt brick masonry (Brick Strength:1400psi-1800psi) set in mud mortar including and raking out joints in foundation and substructure i/c cost of testing				
a)	Upto 4.5" (115 mm) nominal thick brick work	Cu.m	2907.00	13875.58	
b)	Above 4.5" (115mm) nominal thick brickwork	Cu.m	3934.20	14136.66	
11-3	Providing and laying first class solid burnt brick masonry (Brick Strength:1400psi-1700psi) including scaffolding, raking out joints and curing in foundation and substructure/Basement i/c cost of testing				
a)	Upto 4.5" (115 mm) nominal thick brick work				
i)	Cement Sand 1 : 2	Cu.m	3934.20	18836.37	
ii)	Cement sand 1 : 3	Cu.m	3934.20	17582.50	
iii)	Cement sand 1 : 4	Cu.m	3934.20	16946.70	
iv)	Cement sand 1 : 5	Cu.m	3934.20	16575.82	
v)	Cement sand 1 : 6	Cu.m	3934.20	16310.91	
vi)	Cement sand 1 : 7	Cu.m	3934.20	16151.96	
vii)	Cement sand 1 : 8	Cu.m	3934.20	15993.01	
b)	Above 4.5" thick brickwork upto any thickness				
i)	Cement sand 1 : 2	Cu.m	2907.00	18943.75	
ii)	Cement sand 1 : 3	Cu.m	2907.00	17104.74	
iii)	Cement sand 1 : 4	Cu.m	2907.00	16172.24	
iv)	Cement sand 1 : 5	Cu.m	2907.00	15628.28	
v)	Cement sand 1 : 6	Cu.m	2907.00	15239.74	
vi)	Cement sand 1 : 7	Cu.m	2907.00	15006.61	
vii)	Cement sand 1 : 8	Cu.m	2907.00	14773.49	
11-4	Extra for providing and laying first class burnt brick masonry (Brick Strength:1400psi-1800psi) for arches of any kind of wall including scaffolding, formwork and its removal, raking out joints and curing including basement and i/c cost of testing.	Cu.m			
a)	Upto 4.5" (115 mm) nominal thick brick work	Cu.m	3023.40	7668.44	
b)	Above 4.5" thick brickwork upto any thickness	Cu.m	6294.60	10797.76	
11-5	Extra for providing and laying first class tile masonry for arches of any kind of walls including scaffolding, formwork and its removal, raking out joints and curing in foundations, basement and plinth.	Cu.m			
a)	Upto 9" (230 mm) nominal thick tile masonry	Cu.m	4130.76	27453.18	
b)	Above 9" (230 mm) nominal thick tile masonry	Cu.m	4572.36	27894.78	
11-6-1	Extra for every additional 6 ft (2 m) or part thereof in foundation and basement masonry deeper than 6 ft (2 m)	Cu.m	630.12		
11-7-1	Extra for every additional 5 ft (1.5 m) or part thereof in plinth higher than 5 ft (1.5m)	Cu.m	469.92		
11-8-1	Extra for every additional 6 ft (2m) or part thereof for arch brick or tile masonry in foundation and basement masonry deeper than 6ft (2m)	Cu.m	630.12	724.64	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
11-9-1	Extra for every additional 5 ft (1.5m) or part thereof for arch brick or tile masonry in plinth higher than 5ft (1.5m)	Cu.m	469.92	540.41	
11-10	Providing and laying sundried clay bricks set in mud mortar including scaffolding in ground floor superstructure				
a)	Upto 4.5" (115 mm) nominal thick brick work	Cu.m	3508.80	12160.89	
b)	Above 4.5" (115mm) nominal thick brickwork	Cu.m	4536.00	12586.12	
11-11	Providing and laying first class solid burnt brick masonry (Brick Strength:1400psi-1800psi) set in mud mortar including scaffolding, raking out joints and curing in ground floor superstructure and i/c cost of testing				
a)	Upto 4.5" (115 mm) nominal thick brick work	Cu.m	3880.80	12455.70	
b)	Above 4.5" (115mm) nominal thick brickwork	Cu.m	4908.00	13216.66	
11-12	Providing and laying first class solid burnt brick masonry (Brick Strength:1400psi-1800psi) including scaffolding, raking out joints and curing in ground floor superstructure and i/c cost of testing				
a)	Upto 4.5" (115 mm) nominal thick brick work				
i)	Cement sand 1 : 2	Cu.m	3880.80	19192.78	
ii)	Cement sand 1 : 3	Cu.m	3880.80	17904.43	
iii)	Cement sand 1 : 4	Cu.m	3880.80	17251.15	
iv)	Cement sand 1 : 5	Cu.m	3880.80	16870.07	
v)	Cement sand 1 : 6	Cu.m	3880.80	16597.87	
vi)	Cement sand 1 : 7	Cu.m	3880.80	16434.55	
vii)	Cement sand 1 : 8	Cu.m	3880.80	16271.23	
b)	Above 4.5" (115mm) nominal thick brick work				
i)	Cement sand 1 : 2	Cu.m	4908.00	21385.76	
ii)	Cement sand 1 : 3	Cu.m	4908.00	19496.18	
iii)	Cement sand 1 : 4	Cu.m	4908.00	18538.03	
iv)	Cement sand 1 : 5	Cu.m	4908.00	17979.11	
v)	Cement sand 1 : 6	Cu.m	4908.00	17579.89	
vi)	Cement sand 1 : 7	Cu.m	4908.00	17340.35	
vii)	Cement sand 1 : 8	Cu.m	4908.00	17100.82	
11-13	Extra for providing and laying first class burnt brick masonry (Brick Strength:1400psi-1800psi) for arches of any kind of wall including scaffolding, formwork and its removal, raking out joints and curing in ground floor superstructures and i/c cost of testing.				
a)	Upto 4.5" (115 mm) nominal thick brick work	Cu.m	184.80	5363.30	
b)	Above 4.5" (115mm) nominal thick brick work	Cu.m	698.40	5735.02	
11-14	Extra for providing and laying first class tile masonry for arches of any kind of walls including scaffolding, formwork and its removal, raking out joints and curing in ground floor superstructures.				
a)	Upto 9" (230 mm) nominal thick tile masonry	Cu.m	6348.00	29670.42	
b)	Above 9" (230 mm) nominal thick tile masonry	Cu.m	8402.40	31724.82	
11-15	Extra for masonry in pillars and columns in foundation				
a)	Rectangular or square shape	Cu.m	2719.80	2811.91	
b)	Round shape	Cu.m	5971.80	6616.57	
11-16	Extra for masonry in pillars and cloumns in ground floor superstructure				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
a)	Rectangular or square shape	Cu.m	1746.00	1838.11	
b)	Round shape	Cu.m	4998.00	5642.77	
11-17-1	Extra for masonry of any description in steps.	Cu.m	2376.60		
11-18-1	Extra for masonry of any description for bonding old and new masonry including making recesses as required (New masonry inserted in old masonry to be measured)	Cu.m	317.63	428.79	
11-19	Providing and laying first class burnt brick honey comb masonry (Brick Strength:1400psi-1800psi) including scaffolding, raking out joints where required and curing in ground floor superstructure (opening not to be deducted for the purpose of measurement) and i/c cost of testing				
a)	Upto 4.5" (115 mm) nominal thick brick work				
i)	Cement sand 1 : 2	Cu.m	2803.20	14526.59	
ii)	Cement sand 1 : 3	Cu.m	2803.20	13640.53	
iii)	Cement sand 1 : 4	Cu.m	2803.20	13191.23	
iv)	Cement sand 1 : 5	Cu.m	2803.20	12929.14	
v)	Cement sand 1 : 6	Cu.m	2803.20	12741.93	
vi)	Cement sand 1 : 7	Cu.m	2803.20	12629.61	
vii)	Cement sand 1 : 8	Cu.m	2803.20	12517.29	
b)	Upto 13.5" (345 mm) nominal thick brick work				
i)	Cement sand 1 : 2	Cu.m	3070.20	12659.62	
ii)	Cement sand 1 : 3	Cu.m	3070.20	11950.76	
iii)	Cement sand 1 : 4	Cu.m	3070.20	11591.33	
iv)	Cement sand 1 : 5	Cu.m	3070.20	11381.66	
v)	Cement sand 1 : 6	Cu.m	3070.20	11231.89	
vi)	Cement sand 1 : 7	Cu.m	3070.20	11142.03	
vii)	Cement sand 1 : 8	Cu.m	3070.20	11052.17	
11-20	Extra for providing and laying first class burnt brick masonry (Brick Strength:1400psi-1800psi) architrave of required shape of any kind of walls including cutting bricks to required shape, scaffolding, raking out joints and curing in ground floor superstructure and i/c cost of testing				
a)	Upto 9" (230 mm) nominal thick brick work	Cu.m	8659.20	9192.66	
b)	Above 13.5" (345 mm) nominal thick brick work	Cu.m	7632.00	8165.46	
11-21	Extra for providing and laying first class burnt tile masonry architrave of required shape of any kind of walls including cutting tiles to required shape, scaffolding, raking out joints and curing in ground floor superstructure.				
a)	Upto 9" (230 mm) nominal thick tile masonry	Cu.m	10713.60	29532.86	
b)	Above 9" (230 mm) nominal thick tile masonry	Cu.m	9686.40	28505.66	
11-22	Extra for providing and laying first class burnt brick masonry (Brick Strength:1400psi-1800psi) coping of required shape any kind of walls including cutting bricks to required shape, scaffolding, raking out joints and curing in ground floor superstructure and i/c cost of testing.				
a)	Upto 9" (230 mm) nominal thick brick work	Cu.m	6016.20	6282.93	
b)	Above 9" (230 mm) nominal thick brick masonry	Cu.m	4989.00	5255.73	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
11-23	Extra for providing and laying first class burnt tile masonry coping of required shape any kind of walls including cutting tiles to required shape, scaffolding, raking out joints and curing in ground floor superstructure.				
a)	Upto 9" (230 mm) nominal thick tile masonry	Cu.m	9097.80	27516.60	
b)	Above 9" (230 mm) nominal thick tile masonry	Cu.m	7557.00	25975.80	
11-24	Extra for providing and laying first class burnt brick masonry (Brick Strength:1400psi-1800psi) cornice, moulding, string course and drip course of required shape in any kind of walls including cutting of bricks to required shape, scaffolding, raking out joints and curing in ground floor superstructure and i/c cost of testing				
a)	Upto 9" (230 mm) nominal thick brick work	Cu.m	4218.60		
b)	Above 9" (230 mm) nominal thick brick masonry	Cu.m	3448.20		
11-25	Extra for providing and laying first class burnt tile masonry cornice, moulding, barges, string course and drip course of required shape in any kind of walls including cutting tiles to required shape, scaffolding, raking out joints and curing in ground floor superstructure				
a)	Upto 9" (230 mm) nominal thick tile masonry	Cu.m	9097.80	26555.94	
b)	Above 9" (230 mm) nominal thick tile masonry	Cu.m	5374.20	22832.34	
11-26 a)	Extra for brick masonry (Brick Strength:1400psi-1800psi) in first floor	Cu.m	1332.12	1372.08	
b)	Extra for brick or tile masonry in every additional floor over first floor.	Cu.m	853.80	879.41	
11-27 a)	Extra for brick or tile masonry arches in first floor.	Cu.m	1652.52	1894.89	
b)	Extra for brick or tile masonry arches in every additional foor over first floor.	Cu.m	1174.20	1346.42	
11-28 a)	Extra for honey comb masonry (Brick Strength:1400psi-1800psi) in first floor	Cu.m	1011.72	1042.07	
b)	Extra for honey comb masonry in every additional floor over first floor.	Cu.m	853.80	879.41	
11-29	Providing and laying first class brick masonry (Brick Strength:1400psi-1800psi) in steining of walls including scaffolding and curing upto 10 ft (3 m) depth and i/c cost of testing.				
a)	Upto 13.5" (345 mm) nominal thick brick masonry				
i)	Cement sand 1 : 2	Cu.m	5046.60	21300.32	
ii)	Cement sand 1 : 3	Cu.m	5046.60	19705.39	
iii)	Cement sand 1 : 4	Cu.m	5046.60	18896.66	
iv)	Cement sand 1 : 5	Cu.m	5046.60	18424.90	
v)	Cement sand 1 : 6	Cu.m	5046.60	18087.93	
vi)	Cement sand 1 : 7	Cu.m	5046.60	17885.75	
vii)	Cement sand 1 : 8	Cu.m	5046.60	17683.56	
b)	Above 13.5" (345 mm) nominal thick brick masonry				
i)	Cement sand 1 : 2	Cu.m	3839.74	21067.25	
ii)	Cement sand 1 : 3	Cu.m	3839.74	19029.29	
iii)	Cement sand 1 : 4	Cu.m	3839.74	17995.91	
iv)	Cement sand 1 : 5	Cu.m	3839.74	17393.11	
v)	Cement sand 1 : 6	Cu.m	3839.74	16962.53	
vi)	Cement sand 1 : 7	Cu.m	3839.74	16704.19	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
vii)	Cement sand 1 : 8	Cu.m	3839.74	16445.84	
c)	Extra for every additional 5 ft (1.5 m) depth or part thereof for brick masonry in steining of walls.	Cu.m	576.72	594.02	
11-30	Providing and laying first class burnt brick masonry (Brick Strength:1400psi-1800psi) cavity walls bonded with wall ties of approved design at required horizontal and vertical spacings including scaffolding, raking out joints and curing in ground floor superstructure and i/c cost of testing but excluding the cost of wall ties (No deduction will be made from the measurement for cavity in the wall).				
a)	2" to 3" (50 mm to 75 mm) nominal cavity and 4.5" (115 mm) wall width on either side.				
i)	Cement sand 1 : 2	Cu.m	6107.40	19411.61	
ii)	Cement sand 1 : 3	Cu.m	6107.40	18020.65	
iii)	Cement sand 1 : 4	Cu.m	6107.40	17315.34	
iv)	Cement sand 1 : 5	Cu.m	6107.40	16903.91	
v)	Cement sand 1 : 6	Cu.m	6107.40	16610.03	
vi)	Cement sand 1 : 7	Cu.m	6107.40	16433.70	
vii)	Cement sand 1 : 8	Cu.m	6107.40	16257.37	
b)	2" to 3" (50 mm to 75 mm) nominal cavity and 4.5" (115 mm) wall width on one side and 9" (230 mm) wall width on the other side.				
i)	Cement sand 1 : 2	Cu.m	6471.00	21031.53	
ii)	Cement sand 1 : 3	Cu.m	6471.00	19379.76	
iii)	Cement sand 1 : 4	Cu.m	6471.00	18542.21	
iv)	Cement sand 1 : 5	Cu.m	6471.00	18053.63	
v)	Cement sand 1 : 6	Cu.m	6471.00	17704.65	
vi)	Cement sand 1 : 7	Cu.m	6471.00	17495.26	
vii)	Cement sand 1 : 8	Cu.m	6471.00	17285.88	
c)	2" to 3" (50 mm to 75 mm) nominal cavity and 9" (230 mm) wall width on either side.				
i)	Cement sand 1 : 2	Cu.m	5775.60	22490.02	
ii)	Cement sand 1 : 3	Cu.m	5775.60	20055.84	
iii)	Cement sand 1 : 4	Cu.m	5775.60	18821.55	
iv)	Cement sand 1 : 5	Cu.m	5775.60	18101.55	
v)	Cement sand 1 : 6	Cu.m	5775.60	17587.26	
vi)	Cement sand 1 : 7	Cu.m	5775.60	17278.68	
vii)	Cement sand 1 : 8	Cu.m	5775.60	16970.11	
d)	2" to 3" (50 mm to 75 mm) nominal cavity and 4.5" (115 mm) wall width on one side and 13.5" (345 mm) wall width on the other side.				
i)	Cement sand 1 : 2	Cu.m	6289.20	21629.85	
ii)	Cement sand 1 : 3	Cu.m	6289.20	19804.22	
iii)	Cement sand 1 : 4	Cu.m	6289.20	18878.50	
iv)	Cement sand 1 : 5	Cu.m	6289.20	18338.49	
v)	Cement sand 1 : 6	Cu.m	6289.20	17952.78	
vi)	Cement sand 1 : 7	Cu.m	6289.20	17721.35	
vii)	Cement sand 1 : 8	Cu.m	6289.20	17489.92	
e)	Extra for brick masonry in cavity walls in first floor	Cu.m	1518.24	1591.12	
f)	Extra for brick masonry in cavity walls in every additional floor above first floor	Cu.m	1027.20	1076.51	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
11-31	Providing and laying first class hollow burnt brick masonry (Brick Strength:1400psi-1800psi) in walls including scaffolding, raking out joints and curing in ground floor superstructure and i/c cost of testing				
a)	Upto 4.5" (115 mm) nominal thick brick work				
i)	Cement sand 1 : 2	Cu.m	8470.20	23295.48	
ii)	Cement sand 1 : 3	Cu.m	8470.20	22434.48	
iii)	Cement sand 1 : 4	Cu.m	8470.20	21997.90	
iv)	Cement sand 1 : 5	Cu.m	8470.20	21743.23	
v)	Cement sand 1 : 6	Cu.m	8470.20	21561.32	
vi)	Cement sand 1 : 7	Cu.m	8470.20	21452.18	
vii)	Cement sand 1 : 8	Cu.m	8470.20	21343.03	
b)	Above 4.5" (115mm) nominal thick brickwork				
i)	Cement sand 1 : 2	Cu.m	7186.20	22876.67	
ii)	Cement sand 1 : 3	Cu.m	7186.20	21585.18	
iii)	Cement sand 1 : 4	Cu.m	7186.20	20930.31	
iv)	Cement sand 1 : 5	Cu.m	7186.20	20548.31	
v)	Cement sand 1 : 6	Cu.m	7186.20	20275.44	
vi)	Cement sand 1 : 7	Cu.m	7186.20	20111.73	
vii)	Cement sand 1 : 8	Cu.m	7186.20	19948.01	
11-32	Providing and laying first class perforated brick masonry in walls including scaffolding, raking out joints and curing in ground floor superstructure.				
a)	Upto 4.5" (115 mm) nominal thick brick work				
i)	Cement sand 1 : 2	Cu.m	6929.40	22427.92	
ii)	Cement sand 1 : 3	Cu.m	6929.40	21136.44	
iii)	Cement sand 1 : 4	Cu.m	6929.40	20481.57	
iv)	Cement sand 1 : 5	Cu.m	6929.40	20099.56	
v)	Cement sand 1 : 6	Cu.m	6929.40	19826.70	
vi)	Cement sand 1 : 7	Cu.m	6929.40	19662.98	
vii)	Cement sand 1 : 8	Cu.m	6929.40	19499.26	
b)	Above 4.5" (115mm) nominal thick brickwork				
i)	Cement sand 1 : 2	Cu.m	6159.00	22826.14	
ii)	Cement sand 1 : 3	Cu.m	6159.00	20931.96	
iii)	Cement sand 1 : 4	Cu.m	6159.00	19971.49	
iv)	Cement sand 1 : 5	Cu.m	6159.00	19411.21	
v)	Cement sand 1 : 6	Cu.m	6159.00	19011.01	
vi)	Cement sand 1 : 7	Cu.m	6159.00	18770.89	
vii)	Cement sand 1 : 8	Cu.m	6159.00	18530.77	
11-33 a)	Extra for hollow and perforated brick masonry in first floor	Cu.m	1332.12	1372.08	
b)	Extra for hollow and perforated brick masonry in every additional floor over first floor.	Cu.m	853.80	879.41	
11-34-1	Providing and laying fabric steel reinforcement 1" (25 mm) wire mesh weighing not less than 2 kg/sq.m. including cutting to required shape and size, overlaps, wastage etc. the reinforcement shall be embeded in every third horizontal course in basement, plinth and ground floor.	Kg.	44.04	553.08	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
11-35-1	Providing and laying mild steel reinforcement bars in brick work including straightening, removing rust, cutting, bending, wastage, overlaps, placing in position, tying with binding wire (cost of binding wire included) in basement, plinth and ground floor.	Cu.m	18481.20	323614.32	
11-36-1	Providing and laying hoop iron reinforcement in brick work including straightening, cutting, punching, overlaps, wastage and placing in position including anti-corrosive bitumastic paint two coats in basement, plinth and ground floor.	Cu.m	62.50	379.07	
11-37-1	Flat iron wall ties size 8" x 3/4" x 1/4" (200 mm x 20 mm x 5 mm) weighing 39.25 kg per sq.m or 200 mm x 20 mm x 4 mm weighing 31.4 kg./ Sq.m.	Cu.m	73.22	380.73	
11-38-1	Providing and placing mild steel reinforcement bars in steining of brick work in wells. Vertical bars are to be placed in two staggered rows and at 10" (250mm) centered in each row including straightening, removing of rust, cutting, bending, binding, wastage, overlaps, placing in position and tying with binding wire upto 5ft. (1.5m) depth or part thereof.	Kg.	2577.00	307710.12	
11-39-1	Providing and placing hoop iron in steining of brick work in wells including cutting, straightening, bending, wastage, overlaps and placing in position upto 5 ft.(1.5 m) depth or part thereof.	Tonne	70.63	387.21	
11-40 a)	Extra for mild steel bars or hoop iron reinforcement in first floor.	Kg.	10.68	11.53	
b)	Extra for mild steel bars or hoop iron reinforcement in additional floor above first floor.	kg.	6.41	6.92	
11-41-1	Extra for mild steel or hoop iron reinforcement in steining of brickwork in wells for every additional 5 ft (1.5m) depth or part thereof beyond 5ft (1.5m) depth.	kg.	21.54	22.48	
11-42	Providing and laying fire brick lining in walls for fire places laid in mortar of high alumina cement and fine aggregate of crushed fire brick 1:2 including scaffolding in basement, plinth and ground floor superstructures.				
a)	4.5" (115 mm) nominal thick fire brick lining in walls of fire places.	Cu.m	7872.60	24017.49	
b)	9" (230 mm) nominal thick fire brick lining in walls of fire places.	Cu.m	9156.60	20934.11	
11-43	Providing and laying fire brick lining in arches for fire places laid in mortar of high alumina cement and fine aggregate of crushed fire brick 1:2 including scaffolding in basement, plinth and ground floor superstructures.				
a)	4.5" (115 mm) nominal thick fire brick lining in arches of fire places.	Cu.m	10356.00	27298.39	
b)	9" (230 mm) nominal thick fire brick lining in arches of fire places.	Cu.m	9072.00	26528.74	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
11-44	Providing and laying fire brick lining in walls for fire places laid in vitrified fire clay mortar including scaffolding in basement, plinth and ground floor.				
a)	4.5" thick (115mm) nominal thick fire brick lining in walls of fire lining	Cu.m	9156.60	22103.15	
b)	9" thick (230 mm) nominal thick fire brick lining in walls of fire lining	Cu.m	7872.60	20800.61	
11-45	Providing and laying fire brick lining in arches for fire places with vitrified fire clay mortar including scaffolding, formwork and its removal in basement, plinth & ground floor.				
a)	4.5" (115 mm) nominal thick fire brick lining in arches of fire places.	Cu.m	10356.00	23892.43	
b)	9" thick (230 mm) nominal thick fire brick lining in walls of fire lining	Cu.m	9072.00	22535.84	
11-46 a)	Extra for first floor over item 11-42 to 11-45	Cu.m	1332.12	1372.08	
b)	Extra for every additional floor above first floor over item 11-46(a)	Cu.m	853.80	879.41	
11-47	Providing and laying reinforced first class burnt bricks set in cement sand mortar 1:3 in lintel including scaffolding, fromwork and its removal, curing but excluding the cost of reinforcement in basement, plinth and ground floor.	Cu.m	5690.40	24448.84	
11-48	Providing and laying reinforced first class burnt bricks with cement concrete in ribs and on top using crushed aggregate 3/4" and down gauge, mix not leaner than 1:2:4 including formwork and its removal, compacting, curing but excluding the cost of reinforcement in basement and ground floor.				
a)	R.B. Slab 4.5" nominal thick including 1.5" thick R.C.C. ribs and 1.5" thick cover on top.	Cu.m	8172.00	28016.63	
b)	R.B. Slab 6" nominal thick including 1.5" (38mm) thick R.C.C. ribs and 1.5" thick cover on top.	Cu.m	5690.40	23404.29	
c)	R.B. Slab 8" nominal thick including 2" thick R.C. ribs, 1.5" thick cover on top and 4 brick panel laid in cement sand mortar 1:3.	Cu.m	5090.40	21622.73	
11-49	Providing and laying reinforced first class burnt bricks set in cement sand mortar 1:3 in cantilever slab, sun shade etc. including formwork and its removal curing but excluding the cost of reinforcement in basement and ground floor.				
a)	3" nominal thick cantilever slab and sun shade etc.	Cu.m	7999.20	32443.09	
b)	4.5" (115mm) nominal thick cantilever slab and sun shade etc.	Cu.m	7272.00	28195.86	
11-50	Providing and laying reinforced first class burnt bricks set in cement sand mortar 1:3 in stair case waist slab and landing of required section including scaffolding and formwork and its removal, curing but excluding the cost of reinforcement in basement and ground floor.	Cu.m	11208.00	29409.92	
11-51 a)	Extra for R.B. masonry for first floor.	Cu.m	673.80	694.01	
b)	Extra for R.B. masonry for every additional floor over first floor.	Cu.m	673.80	694.01	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
11-52	Extra labour for profile and flared out walls.	Cu.m	1069.20	1101.28	
11-53	Extra labour for pucca brick work in piers and abutment.				
a)	Above 10 ft to 20 ft (3 m to 6 m) height	Cu.m	834.00	859.02	
b)	Above 20 ft (6 m) height	Cu.m	1539.60	1585.79	
11-54	Extra to face work 4.5" (115 mm) nominal thick using special bricks instead of first class burnt bricks.	Cu.m	0.00	0.00	
11-55	Extra for dressing or chamfering bricks.				
a)	Special architectural bricks	100 Nos	1731.60		
b)	All other purposes	100 Nos	865.80		
11-56	Providing and laying ghilafi brick work 13.5" (345mm) nominal thick including scaffolding and raking out joints with 1:5 mortar				
a)	Foundation, basement and plinth	Cu.m	3678.30	13219.84	
b)	Walls in superstructure	Cu.m	3822.00	13363.54	
11-57-1	Providing and laying first class burnt bricks (Brick Strength: 1400psi - 1800psi) flooring or pitching dry bricks laid flat and i/c cost of testing.	Cu.m	1454.40	13805.17	
11-58-1	Providing pise wall (mud walling) in superstructure.	Cu.m	1520.40	2144.40	
11-59-1	Cleaning bricks dismantled from kacha pacca masonry.	%Nos.	2990.40		
11-60-1	Scraping bricks dismantled from pacca masonry.	%Nos.	5767.20		
11-61-1	Supplying and filling sand under floor or plugging in wells.with lead upto 800 ft (250m)	Cu.m	1285.87		
11-62-1	Chamfering sides of head regulators to increase width.	Cu.m	1797.60		
11-63-1	Replacing Kallar eaten bricks	Each	102.72	185.16	
11-64-1	Repairing corners of bridges and other hydraulic masonry works.	Each	1027.20	2263.82	
11-65-1	Extra labour for drains of bath rooms etc.	R.M.	256.80		
11-66-1	Extra work for Marrow corners.	Each	513.60	554.40	
11-67-1	Extra for first class burnt solid or hollow block or tile masonry of any description in any floor or other than building for every 1.50 m. height or part thereof beyond 4.5m.	Cu.m	847.52	955.98	
11-68-1	Extra for reinforcement in brick work of any description for every 5 ft 1.5m height or part thereof beyond 15 ft or 4.5m	Tonne	3246.72	3571.39	
11-69-1	Extra for Brick masonry of height above 12 ft but upto 24 ft on Ground Floor only	Cu.m	15%		

SECTION – 12

STONE MASORY

1. NO DEDUCTION IN MEASURMENTS SHALL BE MADE FOR OPENING HAVING SUPERFICIAL AREA NOT EXCEEDING ONE SQUARE FOOT (0.35 SQUARE METERS)

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
12-1-1	Providing, dressing and laying dry uncoursed rubble masonry in retaining or compound walls including scaffolding.	Cu.m	4963.20	8752.15	
12-2-1	Providing, dressing and laying dry coursed rubble masonry in retaining or compound walls including scaffolding.	Cu.m	6097.20	9921.42	
12-3-1	Providing, dressing and laying dry coursed or uncoursed rubble pitching of any thickness	Cu.m	5016.60	8441.42	
12-4	Providing, dressing and laying uncoursed rubble masonry in foundation, plinth and basement including scaffolding and curing.				
a)	In mud mortar	Cu.m	4663.20	7886.85	
b)	In cement, sand mortar				
i)	1 : 3	Cu.m	4663.20	15204.60	
ii)	1 : 4	Cu.m	4663.20	13509.14	
iii)	1 : 6	Cu.m	4663.20	11813.69	
iv	1 : 8	Cu.m	4663.20	10965.96	
12-5	Providing, dressing and laying coursed rubble masonry in foundation, plinth and basement including scaffolding and curing.				
a)	In mud mortar	Cu.m	8062.80	14948.98	
b)	In cement, sand mortar				
i)	1 : 3	Cu.m	8917.20	21883.24	
ii)	1 : 4	Cu.m	8917.20	20484.48	
iii)	1 : 6	Cu.m	8917.20	19085.73	
iv	1 : 8	Cu.m	8917.20	18386.36	
12-6	Providing, dressing and laying random rubble stone masonry in foundation, plinth and basement including scaffolding and curing.				
a)	In mud mortar	Cu.m	6181.20	10103.24	
b)	In cement, sand mortar				
i)	1 : 3	Cu.m	6181.20	16506.26	
ii)	1 : 4	Cu.m	6181.20	15022.74	
iii)	1 : 6	Cu.m	6181.20	13539.22	
iv	1 : 8	Cu.m	6181.20	12797.45	
12-7	Providing dressing and laying Ashlar Fine masonry in foundation, plinth and basement including scaffolding and curing.				
a)	In cement, sand mortar				
i)	1 : 3	Cu.m	32192.62	42417.62	
ii)	1 : 4	Cu.m	32192.62	41781.83	
iii)	1 : 6	Cu.m	32192.62	41146.03	
12-8	Providing dressing and laying Ashlar rough tooled or blocks in course masonry in foundation, plinth and basement including scaffolding and curing.				
a)	In cement, sand mortar				
i)	1 : 3	Cu.m	28768.66	47440.68	
ii)	1 : 4	Cu.m	28768.66	46465.79	
iii)	1 : 6	Cu.m	28768.66	45490.91	
12-9	Providing dressing and laying Ashlar rock rustic or quarry faced masonry in foundation, plinth and basement including scaffolding and curing.				
a)	In cement, sand mortar				
i)	1 : 3	Cu.m	22941.60	31296.26	
ii)	1 : 4	Cu.m	22941.60	30321.37	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
iii)	1 : 6	Cu.m	22941.60	29346.48	
12-10	Providing dressing and laying Ashlar chamferred masonry in foundation, plinth and basement including scaffolding and curing.				
a)	In cement, sand mortar				
i)	1 : 3	Cu.m	28551.60	38868.27	
ii)	1 : 4	Cu.m	28551.60	37893.38	
iii)	1 : 6	Cu.m	28551.60	36918.49	
12-11	Providing dressing and laying Ashlar fine stone masonry in plain or chequerred tread or risers of steps in course masonry in foundation, plinth basement & ground floor, including scaffolding and curing.				
a)	In cement, sand mortar				
i)	1 : 3	Cu.m	38918.40	48351.31	
ii)	1 : 4	Cu.m	38918.40	47715.51	
iii)	1 : 6	Cu.m	38918.40	47079.71	
12-12	Providing, dressing and laying uncoursed rubble masonry in superstructure including scaffolding and curing in ground floor.				
a)	In mud mortar	Cu.m	5326.80	8583.63	
b)	In cement, sand mortar				
i)	1 : 3	Cu.m	6608.40	17247.06	
ii)	1 : 4	Cu.m	6608.40	16199.05	
iii)	1 : 6	Cu.m	6608.40	14503.60	
iv)	1 : 8	Cu.m	6608.40	13655.87	
12-13	Providing, dressing and laying coursed rubble masonry in superstructure including scaffolding and curing in ground floor (steel reinforcement if used will be paid separately)				
a)	In mud mortar	Cu.m	8897.40	15825.31	
b)	In cement, sand mortar				
i)	1 : 3	Cu.m	9258.60	22241.71	
ii)	1 : 4	Cu.m	9258.60	20842.95	
iii)	1 : 6	Cu.m	9258.60	19444.20	
iv)	1 : 8	Cu.m	9258.60	18744.83	
12-14	Providing, dressing and laying random rubble stone masonry in superstructure including scaffolding and curing in ground floor.				
a)	In mud mortar	Cu.m	10183.80	14305.97	
b)	In cement, sand mortar				
i)	1 : 3	Cu.m	10245.00	20773.25	
ii)	1 : 4	Cu.m	10245.00	19289.73	
iii)	1 : 6	Cu.m	10245.00	17806.21	
iv)	1 : 8	Cu.m	10245.00	17064.44	
12-15	Providing, dressing and laying ashlar fine masonry in superstructure including scaffolding and curing in ground floor.				
a)	In cement, sand mortar				
i)	1 : 3	Cu.m	48136.80	59159.02	
ii)	1 : 4	Cu.m	48136.80	58523.22	
iii)	1 : 6	Cu.m	48136.80	57887.42	
12-16	Providing, dressing and laying ashlar rough tooled or blocks in course masonry in superstructure including scaffolding and curing in ground floor.				
a)	In cement, sand mortar				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
i)	1 : 3	Cu.m	27299.40	45897.96	
ii)	1 : 4	Cu.m	27299.40	44923.07	
iii)	1 : 6	Cu.m	27299.40	43948.19	
12-17	Providing, dressing and laying ashlar rock rustic or guary faced masonry in superstructure including scaffolding and curing in ground floor.				
a)	In cement, sand mortar				
i)	1 : 3	Cu.m	25077.60	33539.06	
ii)	1 : 4	Cu.m	25077.60	32564.17	
iii)	1 : 6	Cu.m	25077.60	31589.28	
12-18	Providing, dressing and laying ashlar fine chamferred masonry in superstructure including scaffolding and curing in ground floor.				
a)	In cement, sand mortar				
i)	1 : 3	Cu.m	31095.60	41539.47	
ii)	1 : 4	Cu.m	31095.60	40564.58	
iii)	1 : 6	Cu.m	31095.60	39589.69	
12-19	Providing, dressing and laying ashlar fine stone masonry punched work in superstructure including scaffolding and curing in ground floor. (Gross measurement will be made).				
a)	In cement, sand mortar				
i)	1 : 3	Cu.m	45265.20	57193.16	
ii)	1 : 4	Cu.m	45265.20	56557.36	
iii)	1 : 6	Cu.m	45265.20	55921.56	
12-20	Providing, dressing and laying ashlar fine stone masonry in sink or moulded work upto & sectional area of 50 Sq.in. (325 Sq.cm) in cornice, coping and architrave etc. in superstructure including scaffolding and curing in ground floor.				
a)	In cement, sand mortar				
i)	1 : 3	R.M.	1449.93	1789.10	
ii)	1 : 4	R.M.	1449.93	1781.83	
iii)	1 : 6	R.M.	1449.93	1774.57	
12-21	Providing, dressing and laying ashlar fine stone masonry in sink or moulded work above sectional area of 50 sq.in. to 100 sq.in. (325 sq.cm to 650 sq.cm) in cornice, coping and architrave etc. in superstructure including scaffolding and curing in ground floor.				
a)	In cement, sand mortar				
i)	1 : 3	R.M.	2958.76	3603.02	
ii)	1 : 4	R.M.	2958.76	3588.57	
iii)	1 : 6	R.M.	2958.76	3574.12	
12-22	Dressing stones (Dressed face shall be considered for measurement).				
a)	Random rubble hammer dressed	Sq.m	1414.74	1556.22	
b)	Ashlar rough tool dressed	Sq.m	3179.86	3380.66	
c)	Ashlar chisel dressed	Sq.m	3887.24	4154.85	
d)	Ashlar fine dressed	Sq.m	8485.15	8963.50	
12-23	Extra for providing, dressing and laying stone masonry for arches of any kind of walls including scaffolding, formwork and its removal, raking out joints and curing.	Cu.m	2054.40	2157.12	
12-24 a)	Extra for first floor over item No.12 - 11 to 12 - 14	Cu.m	1678.20	1762.11	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b	Extra for every additional floor above first floor on item 12 - 24 (a)	Cu.m	1263.96	1327.16	
12-25 a)	Extra for first floor over item No.12 - 15 to 12 - 18.	Cu.m	2148.60	2256.03	
b)	Extra for every additional floor above first floor on item 12 - 25 (a)	Cu.m	1390.56	1460.09	
12-26 a)	Extra for punched work in first floor on item No.12 - 19.	Cu.m	1828.20	1919.61	
b)	Extra for every additional floor above first floor on item 12 - 26 (a).	Cu.m	1337.16	1404.02	
12-27 a)	Extra for first floor on item 12 - 20.	R.M.	19.18	20.14	
b)	Extra for every additional floor above first floor on item 12 - 27 (a).	R.M.	14.45	15.17	
12-28 a)	Extra for first floor on item 12 - 21.	R.M.	48.83	51.27	
b)	Extra for every additional floor above first floor on item 12 - 28 (a).	R.M.	31.60	33.18	
12-29-1	Extra for stone masonry of any description in any floor or other than building for every 5 ft. (1.5 m.) height or part thereof beyond 15 ft. (4.5m) height.	Cu.m		955.98	
12-30-1	Extra for stone masonry in cornice, coping and architrave in any floor or other than building for every 5 ft.(1.5m) height or part thereof beyond 15ft. (4.5m) on item 12-21	R.M.	15.57	16.35	
12-31-1	Extra for stone masonry in cornice, coping and architrave in any floor or other than building for every 5 ft. (1.5m) height or part thereof beyond 15ft. (4.5m) on item 12-22	R.M.	23.01	24.16	

SECTION – 13

ROOFING

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
13-1 a)	Providing and laying roof insulation comprising single layer of first class burnt brick tile 12"x6"x1.25" laid with 1:6 cement sand mortar and grouted with 1:3 cement sand mortar laid over 4inches (100mm) thick earth and 1inch (25mm) thick gobri leaping over two coats of hot bitumen @ 34 lbs. per 100 Sq.ft.(1.65 Kg/Sq.m) sand blended covered with polythene sheet 300 gauge provided including sand pointing underside of tiles including curing	Sq.m	1120.80	2986.85	
b)	Providing and laying first class burnt brick tile roofing laid in 1 : 6 cement sand mortar including 1 : 2 cement sand pointing underside of tiles including curing for Tee iron/girder roof (Cost of Tee iron/ girder not included)	Sq.m	414.96	2179.26	
c)	Extra if PCC tiles are used in place of first class burnt bricks in item 13-1(b) above	Sq.m	145.24	762.74	
13-2 a)	Providing and laying second class brick tile roofing comprising 4 inches (100mm) thick earth and 1 inch (25 mm) thick mud plaster with gobri leeping over 1/2 inch (13mm) thick cement plaster 1:6 with 34 lbs./100 Sq.ft.(1.65 Kg./Sq.m.) hot bitumen coating sand blended in one coat, provided over one layer of tiles 12" x 6"x 2" laid in 1:6 cement sand mortar including 1:2 cement sand pointing underside of tiles including curing	Sq.m	1120.80	2758.81	
b)	Providing and laying second class brick tile roofing comprising 4 inches (100mm) thick earth and 1 inch (25 mm) thick mud plaster with gobri leeping provided over one layer of tiles 12"x 6"x 2" laid in 1:6 cement sand mortar including 1:2 cement sand pointing underside of tiles including curing	Sq.m	958.08	2071.36	
13-3	Covering mud roof with coaltar 37 lbs./100 S.ft.(1.8 Kg /Sq.m) and fine sand.	Sq.m	54.54	275.43	
13-4	Filling spaces in between:				
a)	Wooden battens over beams filled with deodar wood pieces (spacers)	Sq.m	205.44	1162.81	
b)	R.C.C. battens over beams filled with cement concrete blocks 1 : 3 : 6	Sq.m	327.24	432.17	
c)	Spaces filled with bricks in 1 : 3 cement sand	Sq.m	85.56	221.78	
13-5	Providing and laying roof insulation comprising single layer of first class burnt brick tile 9"x 4.5"x 1.5" laid with 1:6 cement sand mortar and grouted with 1:3 cement sand mortar laid over 4inches (100mm) thick earth and 1inch (25mm) thick mud plaster without bhoosa over two coats of hot bitumen @ 34 lbs. per 100 Sq.ft.(1.65 Kg/Sq.m) sand blended covered with polythene sheet 300 gauge including curing etc. complete in all respect.	Sq.m	996.72	2922.84	
13-6	Providing and filling earth over roof including watering, ramming, mud plastering with gobri leaping				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
a)	3 inches (75mm) thick earth filling and mud plastering 1 inch (25mm) nominal thickness	Sq.m	222.24	363.18	
b)	4 inches (100mm) thick earth filling and 1 inch (25 mm) thick mud plastering	Sq.m	264.96	423.30	
13-7	3.25 mm nominal thick gobar leaping on roof or floors.	Sq.m	40.68	44.69	
13-8	Providing and fixing corrugated G.I. sheets with G.I. hooks, bolts, nuts, limpets and bitumen washers including cutting to required sizes and overlaps but without valleys and ridges (excluding cost of frame work) in ground floor				
a)	18 S.W.G. (1.41 mm) thick sheets roofing	Sq.m	287.29	4977.91	
b)	20 S.W.G. (1.31 mm) thick sheets roofing	Sq.m	287.29	3809.33	
c)	22 S.W.G. (1.21mm) thick sheets roofing	Sq.m	287.29	3248.70	
d)	24 S.W.G. (1.06 mm) thick sheets roofing	Sq.m	287.29	2744.45	
e)	26 S.W.G. (0.97 mm) thick sheets roofing	Sq.m	287.29	2477.53	
13-9	Providing khassi parnalas in cement sand mortar 1 : 2, 12inches (300mm) outside width finished smooth with a floating coat of neat cement including water proofing admixture @ 2 % of cement content or as otherwise advised by manufacturer.	R.M.	761.76	1092.61	
13-10	Providing Khurras on roof 24" x 24" x 2" (600mm x 600mm x 50mm) size including water proofing admixture @ 2 % of cement content or as otherwise advised by manufacturer.	Each	907.20	1350.15	
13-11	Providing bottom khurras of brick masonry in cement sand mortar 1:6, size 48"x24"x 1.5" (1250mmx 600mmx 38mm) over 3inches (75mm) thick cement concrete 1:4:8 including water proofing admixture @ 2 % of cement content or as otherwise advised by manufacturer.	Each	907.20	2219.80	
13-12	Providing and laying plain galvanized iron sheet 22 SWG (1.21 mm) rain water down pipe including cost of clamps and fixing in position				
a)	4 inches (100 mm) diameter down pipe	R.M.	581.76	1404.10	
b)	5 inches (125 mm) diameter down pipe	R.M.	581.76	1602.34	
13-13	Providing and fixing plain galvanized iron sheet flashing 22 SWG (1.21mm)	Sq.m	2087.04	3594.12	
13-14	Providing and fixing in position cast iron rain water down pipe including painting and clamps but excluding heads and shoes				
a)	4 inches (100 mm) diameter C.I. down pipe	R.M.	513.60	925.37	
b)	3 inches (75 mm) diameter C.I. down pipe	R.M.	256.80	561.68	
13-15	Providing and fixing in position cast iron rain water down pipe head including cost of clamps, holdfasts, nuts, bolts and painting.				
a)	4 inches (100 mm) diameter C.I. head	Each	83.40	582.57	
b)	3 inches (75 mm) diameter C.I. head	Each	83.40	509.97	
13-16	Providing and fixing cast iron rain water pipe shoe, bend and offset including cost of clamps, holdfasts, bolts, nuts and painting				
a)	4 inches (100 mm) dia. shoe or bend or offset	Each	256.80	838.74	
b)	3 inches (80 mm) dia. shoe or bend or offset	Each	256.80	723.24	
13-17	Providing and fixing plain 22 SWG (1.21 mm) G.I. sheet spout size 30"x6" (750mm x 150mm) including painting	Each	581.76	878.04	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
13-18	Providing and fixing plain G.I. sheets with G.I. bolts, nuts, limpets and bitumen washers including cutting to required sizes and overlaps but excluding cost of frame work in ground floor				
a)	18 SWG (1.41 mm.) thick sheet roofing	Sq.m	287.29	3892.59	
b)	20 SWG (1.31 mm.) thick sheet roofing	Sq.m	287.29	3235.43	
c)	22 SWG (1.21 mm.) thick sheet roofing	Sq.m	287.29	2706.50	
d)	24 SWG (1.06 mm.) thick sheet roofing	Sq.m	287.29	2289.80	
e)	26 SWG (0.97 mm.) thick sheet roofing	Sq.m	287.29	2017.34	
13-19	Extra for fixing of G.I. corrugated or plain sheets on curved frame surface to a minimum radius of 5 ft. (1.5m) in ground floor	Sq.m	160.20		
13-20	Providing and fixing corrugated asbestos cement sheets roofing 1/4" (6.4mm) thick with G.I. Hooks, bolts and G.I. or bitumen washers without valleys and ridges excluding the cost of frame work in ground floor.	Sq.m	256.80	1757.64	
13-21	Providing and fixing corrugated asbestos cement sheet coloured roofing 5/32" (4mm) thick with G.I. Hooks, bolts and G.I. Or bitumen washers, without valleys and ridges excluding the cost of frame work in first floor.	Sq.m	256.80	1757.64	
13-22	Providing and fixing corrugated G.I. sheet ridges 6 inches (150mm) girth and laps on either side with G.I. bolts, nuts, limpets and bitumen washers in ground floor 6" Lap and 18" overall width.				
a)	18 SWG (1.41 mm) G.I. galvanized sheet ridge	Sq.m	368.70	2392.95	
b)	20 SWG (1.31 mm) G.I. galvanized sheet ridge	Sq.m	368.70	2041.47	
c)	22 SWG (1.21 mm) G.I. galvanized sheet ridge	Sq.m	368.70	1777.34	
d)	24 SWG (1.06 mm) G.I. galvanized sheet ridge	Sq.m	368.70	1540.00	
e)	26 SWG (0.97 mm) G.I. galvanized sheet ridge	Sq.m	368.70	1372.96	
13-23	Providing and fixing fiber glass sheet with G.I. bolts, nuts, limpets and bitumen washers in ground floor.	Sq.m	368.70	2733.74	
13-24	Providing and fixing plain G.I. sheet ridges 6inches (150mm) girth and laps on either side with G.I. hooks, nuts, limpets and bitumen washers in ground floor 9" Lap and 24" overall width.				
a)	18 SWG (1.41 mm) plain galvanized sheet ridge	Sq.m	368.70	2010.08	
b)	20 SWG (1.31mm) plain galvanized sheet ridge	Sq.m	368.70	1714.20	
c)	22 SWG (1.21mm) plain galvanized sheet ridge	Sq.m	368.70	1476.01	
d)	24 SWG (1.06mm) plain galvanized sheet ridge	Sq.m	368.70	1288.37	
e)	26 SWG (0.97 mm) plain galvanized sheet ridge	Sq.m	368.70	1165.56	
13-25	Providing and fixing Non Asbestos Cement Fibre ridge two pieces close fitting or plain wing adjustable, 1/4 inch (6.4mm) thick with bolts and nuts in ground floor	R.M.	41.70	555.45	
13-26	Providing and fixing Non Asbestos Cement Fibre ridge two pieces close fitting or plain wing adjustable, 5/32" (4mm) thick with bolts and nuts in ground floor	R.M.	41.70	530.03	
13-27	Providing and fixing Non Asbestos Cement Fibre ridge plain angular one piece including bolts and nuts in ground floor	R.M.	41.70	401.37	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
13-28	Providing and fixing two piece adjustable asbestos cement ridge finials in any floor at any height with bolts and nuts.				
a)	Grey Colour	Each	256.80	552.24	
b)	Other than grey colour	Each	256.80	523.24	
13-29	Providing and fixing plain galvanized iron gutters 18 inches (450mm) girth with bolts and nuts in ground floor				
a)	18 SWG (1.41mm) thick G.I. sheet gutter	R.M.	181.56	1692.07	
b)	20 SWG (1.31mm) thick G.I. sheet gutter	R.M.	181.56	1421.89	
c)	22 SWG (1.21mm) thick G.I. sheet gutter	R.M.	181.56	1204.55	
13-30	Providing and fixing 22 SWG (1.21mm) G.I. sheet gutter semi circular 12inches (300mm) diameter.	R.M.	320.40	1529.54	
13-31	Providing and fixing Non Asbestos Cement Fibre valley gutters size 9" x 6" (229mmx 152mm) and 1/4" (6.4mm) thick in ground floor	R.M.	181.56	1708.64	
13-32	Providing and fixing 1/4" (6.4mm) thick plain Non Asbestos Cement Fibre sheet ceiling on wooden frame with deodar wood beading 2" x 1/2" (51mm x13mm) of required shape fixed with screws perforated in corners if required but excluding the cost of frame in ground floor	Sq.m	306.63	2274.38	
13-33 a)	Providing and fixing 1/2" (13mm) thick Medium Density Fibreboard (Lasani) ceiling of required shape fixed with screws and nails perforated in corners if required but excluding the cost of frame in ground floor upto 14 ft high including guffing.	Sq.m	306.63	2551.17	
b)	Same as Item 13-33 but for Medium Density Fibre board 3/4" (18 mm)	Sq.m	306.63	3005.84	
13-34	Providing and fixing thermopore sheet ceiling on GI powder coated frame required shape, fixed with screws perforated in corners if required but excluding the cost of frame in ground floor				
a)	1/2 inch (13mm) thick thermopore sheet ceiling	Sq.m	102.72	1390.74	
b)	1 inch (25 mm) thick thermopore sheet ceiling	Sq.m	102.72	1770.63	
c)	1-1/2 inch (38 mm) thick thermopore sheet	Sq.m	102.72	2150.52	
13-35	Providing and fixing hessian cloth ceiling with wooden beading 2"x1/2" (50mm x13mm) in ground floor	Sq.m	191.64	1760.28	
13-36	Providing, fixing and hoisting best quality wood ceiling frame of required section including providing approved anti-termite treatment				
a)	Deodar wood	Sq.m	2654.40	6775.61	
b)	Partal wood	Sq.m	2654.40	3842.33	
c)	Kail wood	Sq.m	2654.40	4062.32	
13-37	Extra labour for erection of G.I.corrugated sheets, plain sheets or Non Asbestos Cement Fibre Sheet Roofing, above 20 ft. (6 m) height in difficult position, including lifting with care and special scaffolding along live electric wire.	Sq.m	72.72		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
13-38	Supplying and laying twin plain G.I. sheet 20 SWG (1.31 mm) painted with hot bitumen 1.65 kg/sq.m. with polythene film in between 300 gauge (0.03 mm) to provide a sliding joint under the bearing of the beams including 3 inch (75 mm) long three nos. bars to act as holdfasts on walls and beams.	Sq.m	250.20	6200.16	
13-39	Providing and laying first class tile roof insulation comprising single layer of tiles 9"x 4-1/2"x 1-1/2" grouted with cement sand mortar 1:3 laid over 2 inch (50mm) thick earth including mud plaster over thermopore sheet over polythene sheet 300gauge (0.03mm) over a layer of hot bitumen coating, complete in all respect.				
a)	Using thermopore sheet 1/2 inch (13mm) thick.	Sq.m	840.84	4327.39	
b)	Using thermopore sheet 1 inch (25mm) thick.	Sq.m	840.84	4705.39	
c)	Using thermopore sheet 1-1/2 inch (37mm) thick.	Sq.m	840.84	5083.39	
13-40	Providing and fixing non asbestos cement fibre rain water down pipe 4 inches (100mm) dia. with shoe and other accessories	R.M.	128.40	2959.62	
13-41	Making recess in existing brick masonry for bearing of beam girder, R.S joist including repairing damaged surface				
a)	Upto 12 inches (0.30 m) height of girder or beam	Each	610.20	671.22	
b)	For every 6 inches (0.15 m) additional height or part thereof	Each	331.80	364.98	
13-42	Making jarries in existing masonry/concrete for providing recesses for bearing of R.C.C. roof slab including repairing the damaged surface				
a)	Slab upto 6 inches (150mm) thick in brick masonry	R.M.	150.00	177.00	
b)	Slab exceeding 6 inches (150mm) thick in brick masonry	R.M.	225.00	265.50	
c)	Slab upto 6 inches (150mm) thick in stone masonry	R.M.	225.00	265.50	
d)	Slab exceeding 6 inches (150mm) thick in stone masonry or plain concrete	R.M.	339.00	400.02	
e)	Slab upto 6 inches (150mm) thick in R.C.C	R.M.	300.00	354.00	
f)	Slab exceeding 6 inches (150mm) thick in R.C.C	R.M.	450.00	531.00	
13-43	Hoisting R.S. beams or wooden beams and placing in position.	Each	427.20		
13-44	Hoisting and placing in position wooden ballies over roof.	Each	106.80		
13-45	Extra for roofing of any description other than R.C.C. in any floor for every 5 ft. (1.5m) height or part thereof beyond 15 ft. (4.5 m)	Sq.m	36.31	56.28	
13-46	Extra for ridges, valleys, gutters etc. of any description for every 5ft (1.5m) height or part therof beyond 15 ft (4.5m)	Sq.m	106.57	109.47	
13-47	Extra for ceiling of any description in any floor for every 5 ft. (1.5m) height or part therof beyond 15 ft. (4.5m)	Sq.m	142.42	195.47	
13-48	Providing and laying 1" thick glass wool/roof kool sheets in 1" thick sheet cavity walls	Sq.m	453.78	1099.63	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
13-49	Providing and laying first class tile roof insulation comprising single layer of tiles 12"x 6"x 1-1/2" grouted with cement sand mortar 1:3 laid over 2.5" thick cement concrete 1:4:8 over glass wool /roof kool sheet wraped in polythene sheet 300gauge (0.03mm.) over a coat of PB- 4 bitumen layer at the rate of 1.65 Kg./Sq.m.	Sq.m	893.99	4088.47	
13-50	Providing and laying first class tile roof insulation comprising single layer of tiles 12"x 6"x 1-1/2" grouted with cement sand mortar 1:3 laid over 3" thick mud plaster over glass wool /roof kool sheet wraped in polythene sheet 300 gauge (0.03 mm.) over a coat of PB-4 bitumen layer at the rate of 1.65 Kg/Sq.m.	Sq.m	893.99	4686.84	
13-51	Providing and laying G.I. pipes insulation for water supply delivery pipe comprising glass wool, jutoid water proof covered with plaster of paris treatment				
a)	Upto 1 inch (25 mm) dia. pipe	R.M.	448.84	755.94	
b)	Upto 1" to 2" (25 mm to 50 mm) dia. pipe	R.M.	516.17	869.33	
c)	Upto 2" to 3" (50 mm to 75 mm) dia. pipe	R.M.	583.49	982.73	
13-52	Add extra for respective payable item of ground floor				
a)	For first floor	% Increase	10.0%		
b)	For every additional floor above first floor	% Increase	7.5%		
13-53	Providing and fixing C.I. pipe spouts of required length and dia including fixing in cement mortar 1:4				
a)	2" (50 mm) dia.	R.M.	159.72	1446.72	
b)	3" (75 mm) dia.	R.M.	159.72	2562.12	
c)	4" (100 mm) dia.	R.M.	159.72	4119.72	
13-54	Providing and fixing Non Asbestos Cement Fibre pipe spouts of required length and dia including fixing in cement mortar 1 : 4.				
a)	2" (50 mm) dia.	R.M.	159.72	489.72	
b)	3" (75 mm) dia.	R.M.	159.72	582.12	
c)	4" (100 mm) dia.	R.M.	159.72	700.92	
13-55	Providing and fixing Non Asbestos Cement Fibre rain water down pipe with sealing collars, bolts and nuts and tail piece fixed in cement concrete 1:2:4 including filling joints with asbestos rope and cement mortar 1:2				
a)	3" (75 mm) dia.	R.M.	200.00	494.40	
b)	4" (100 mm) dia.	R.M.	200.00	563.40	
13-56	Providing and fixing shoe of Non Asbestos Cement Fibre rain water down pipe with mild steel fastener fixed in cement concrete 1:2:4 including filling joints with cement mortar 1:2				
a)	3" (75 mm) dia.	Each	406.80	615.60	
b)	4" (100 mm) dia.	Each	406.80	658.80	
13-57	Providing and fixing Non Asbestos Cement Fibre plain bend of any degree for rain water down pipe with mild steel fasteners fixed in cement concrete 1:2:4 including filling joints with cement mortar 1:2.				
a)	3" (75 mm) dia.	Each	406.80	730.80	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	4" (100 mm) dia.	Each	406.80	802.80	
13-58	Providing and fixing with 6" (150 mm) projection Non Asbestos Cement Fibre offset for rain water down pipe with mild steel fasteners fixed in cement concrete 1:2:4 including filling joints with cement mortar 1:2.				
a)	3" (75 mm) dia.	Each	406.80	1033.20	
b)	4" (100 mm) dia.	Each	406.80	1810.80	
13-59	Providing and fixing with Non Asbestos Cement Fibre head of any shape for rain water down pipe with mild steel fasteners fixed in cement concree 1:2:4 including filling joints with cement mortar 1:2.				
a)	3" (75 mm) dia.	Each	406.80	946.80	
b)	4" (100 mm) dia.	Each	406.80	1738.80	
13-60	Providing and fixing P.V.C rain water down pipe with mild steel clamps, bolts and nuts fixed in cement concrete 1:2:4.				
a)	3" (75 mm) dia.	R.M.	240.58	1933.48	
b)	4" (100 mm) dia.	R.M.	240.58	1110.28	
c)	6" (150 mm) dia.	R.M.	240.58		
13-61	Providing and fixing P.V.C. socket for rain water downpipe.				
a)	3" (75 mm) dia.	Each	99.00	429.00	
b)	4" (100 mm) dia.	Each	99.00	673.80	
c)	6" (150 mm) dia.	Each	99.00	1935.00	
13-62	Providing and fixing U-P.V.C bend of any degree for rain water down pipe with M.S. clamps bolts and nuts in cement concrete 1:2:4.				
a)	3" (75 mm) dia.	Each	1113.60	1578.96	
b)	4" (100 mm) dia.	Each	1113.60	1734.96	
c)	6" (150 mm) dia.	Each	1113.60	5394.96	
13-63	Providing and fixing U-P.V.C offset of any degree for rain-water down pipe on walls with M.S. clamps, bolts and nuts in cement concrete 1:2:4.				
a)	3" (75 mm) dia.	Each	1113.60	1734.96	
b)	4" (100 mm) dia.	Each	1113.60	1914.96	
c)	6" (150 mm) dia.	Each	1113.60	2514.96	
13-64	Providing and fixing 3/16" (5 mm) thick M.S. caps of approved size and shape on top of chimney of R.C.C. pipe including two coats of paint on priming coat.				
a)	4" (100 mm) dia.	Each	160.20	628.20	
b)	6" (150 mm) dia.	Each	160.20	1031.40	
13-65	Providing and fixing PVC caps of approved size and shape on top of chimney of R.C.C. pipe.				
a)	4" (100 mm) dia.	Each	160.20	496.20	
b)	6" (150 mm) dia.	Each	160.20	676.20	
13-66 a)	Extruded Polystyrene Rigid board with thickness 50 mm is installed	Sq.m	8.54	1395.44	
b)	Extruded Polystyrene Rigid board with thickness 38 mm is installed	Sq.m	6.62	1031.72	
c)	Extruded Polystyrene Rigid board with thickness 25 mm is installed	Sq.m	5.34	728.94	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
13-67	Removing of existing brick tiles on roof, and Providing and laying water proofing treatment on roofs by applying cement slurry mixed with water proofing cement compound consisting of; a). Applying first layer of slurry of cement @ 0.488 kg/ sqm mixed with water proofing cement compound @ 0.253 kg/ sqm, after surface preparation, b).Laying second layer of fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm, c). Third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/ sqm mixed with water proofing cement compound @ 0.670 kg/ sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around. d) Fourth and final layer of removed brick tile with cement mortar	Sq.m	940.49	10928.67	
13-68	Providing and applying two coats of High Albedo paint having minimum Solar Reflective Index (SRI) 108 (with solar reflectance & thermal emittance tested as per ASTM) C 1549 and ASTM C 1371 respectively), The coating thickness and the methodology of application shall strictly as per manufacturer's specifications and as approved by engineer In charge. Surface preparation includes cleaning with metal wire brush to remove all dust, fungus etc., washing with water all complete. The contractor shall give guarantee for the perfomance of SRI and also the durabitity of coating, all complete as per direction of Engineer-in-incharge (@ of atleast 0.5 litre per Sq.M.)	Sq.m	205.44	783.99	
13-69	Providing and fixing Heat Resistant Terrace Tiles (300 mm x 300 mm x 20 mm) with SRI (solar refractive index) > 78, solar reflection > 0.70 and initial emittance > 0.75 on waterproof and sloped surface of terrace, laid on 20 mm thick cement sand mortar in the ratio of 1:4 (1 cement : 4 coarse sand) and grouting the joints with mix of white cement & marble powder in ratio of 1:1, including rubbing and polishing of the surface upto 3 cuts complete, including providing skirting upto 150 mm height along the parapet walls in the same manner.	Sq.m	669.12	3403.11	

SECTION – 14

FLOORING

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
14-1	Providing and laying hand mixed cement concrete bed under floors using graded Crushed Aggregate upto 1-1/2" (37 mm) and down gauge complete with leveling, ramming, watering and curing.				
a)	1 : 3 : 6	Cu.m	3761.38	17003.59	
b)	1 : 4 : 8	Cu.m	3761.38	15090.08	
c)	1 : 5 : 10	Cu.m	3761.38	15126.32	
14-2 a)	Providing and laying 1:2:4 cement concrete floor using using crushed aggrgate 3/4" (19mm) and down gauge in ground floor laid in panels including formwork, consolidation, finishing and curing.				
i)	1-1/2" (37mm) nominal thick flooring	Sq.m	297.48	863.65	
ii)	2" (50 mm) nominal thick flooring	Sq.m	370.20	1200.59	
iii)	3" (75 mm) nominal thick flooring	Sq.m	453.60	1585.94	
iv)	4" (100 mm) nominal thick flooring	Sq.m	520.98	2030.77	
v)	5" (125 mm) nominal thick flooring	Sq.m	584.04	2471.28	
vi)	Extra if ordinary portland (grey cement) mixed with pigment of approved shade and color is used in topping of 1/8" (3mm) thickness	Sq.m	121.80	177.46	
14-2 b)	Providing and laying 1:2:4 cement concrete floor using crushed aggrgate 3/4" (19mm) and down gauge in ground floor laid in panels using glass strips but excluding the cost of glass strips including consolidation, finishing and curing.				
i)	1-1/2" (37mm) nominal thick flooring	Sq.m	276.12	793.06	
ii)	2" (50 mm) nominal thick flooring	Sq.m	370.20	1059.45	
iii)	3" (75 mm) nominal thick flooring	Sq.m	453.60	1487.48	
14-2 c)	Extra above item 14-2(a) and 14-2(b)				
i)	Extra for basement	Sq.m	213.60		
ii)	Extra for first floor	Sq.m	256.32		
iii)	Extra for every additional floor above first floor	Sq.m	245.64		
14-3 a)	Extra for providing and using white cement instead of ordinary portland cement	Sq.m		31200.00	
b)	Extra for providing and laying 4" (100 mm) thick sand cushion under floor.	Sq.m			
c)	Extra for providing and laying 2" (50 mm) thick sand cushion under floor.	Sq.m			
14-4	Providing and laying terrazzo/mosaic floor in ground floor over 1" (25mm) thick base of 1:2:4 cement concrete using crushed aggrgate 3/4" (19mm) and down grade laid in panels or approved pattern including formwork, curing, cutting, removing and polishing.				
a)	1/4" (6mm) thick terrazzo topping 1:2 (one cement & 2 marble chips)	Sq.m	667.68	1756.77	
b)	3/8" (9mm) thick terrazzo topping 1:2 (one cement & 2 marble chips)	Sq.m	692.40	2155.90	
c)	1/2" (13mm) thick terrazzo topping 1:2 (one cement & 2 marble chips)	Sq.m	717.12	2540.60	
d)	3/4" (19mm) thick terrazzo topping 1:2 (one cement & 2 marble chips)	Sq.m	791.28	3483.99	
e)	Extra for colouring material for every 1/8" (3.2mm) thick terrazzo floor.	Sq.m	85.44	91.53	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
14-5	Providing and laying Conglomerate flooring (two coat work) having 1/2" (9mm) thick wearing surface comprising 1 part of cement & 2 parts of stone chips passing 3/16" sieve, over 1:3:6 concrete base using crushed aggregate laid in panels or approved pattern including formwork, curing, and surface finishing as approved by Engineer Incharge.				
a)	1-1/2" (37mm) thick	Sq.m	798.60	1306.07	
b)	1-3/4" (45mm) thick	Sq.m	809.28	1360.60	
c)	2" (50mm) thick	Sq.m	976.08	1615.09	
14-6	Providing and laying floor 1:2:4 reinforced cement concrete using crushed aggregate 3/4" (19mm) and ground floor including formwork, consolidation, finishing and curing but excluding the cost of reinforcement.				
a)	1-1/2" (37mm) nominal thick flooring	Sq.m	276.12	916.14	
b)	2" (50 mm) nominal thick flooring	Sq.m	370.20	1223.56	
c)	3" (75 mm) nominal thick flooring	Sq.m	453.60	1733.64	
d)	Extra for first floor	Sq.m	85.44		
e)	Extra for every additional floor above first floor	Sq.m	69.42		
14-7-1	Providing and laying M.S. reinforcement bars including cutting, bending, binding, wastage, overlaps not shown on drawings and placing in position on cement concrete precast chairs, tying with binding wire including cost of binding wire in cement concrete floors in ground floor.	Ton	1327.20	320161.92	
14-8-1	Providing and laying in ground floor 1.41 mm 18 BWG gauge expanded metal 3/4"x2.5" (19mm x 64mm) mesh as reinforcement including the cost of chairs, cutting, wastage, overlaps and binding wire.	Sq.m	85.44	377.77	
14-9	Providing and laying super white 12"x12" marble tiles floor fine dressed on surface without winding in ground floor and laid over 1" (25mm) thick cement sand mortar 1:2 setting tiles with portland cement slurry over cement mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing including the cost of cement mortar.				
a)	1/2" (13 mm) thick marble tiles floor	Sq.m	850.08	4395.67	
b)	3/4" (19 mm) thick marble tiles floor	Sq.m	850.08	4706.26	
c)	1" (25 mm) thick marble tiles floor	Sq.m	850.08	5389.56	
14-10	Deduct from item 14-9 above if Lasbela marble is used instead of super white marble				
a)	1/2" (13 mm) thick marble tiles floor	Sq.m		-243.60	
b)	3/4" (19 mm) thick marble tiles floor	Sq.m		-243.60	
c)	1" (25 mm) thick marble tiles floor	Sq.m		33.72	
14-11	Deduct from item 14-9 above if Badal marble is used instead of super white marble				
a)	1/2" (13 mm) thick marble tiles floor	Sq.m		1583.40	
b)	3/4" (19 mm) thick marble tiles floor	Sq.m		1827.00	
c)	1" (25 mm) thick marble tiles floor	Sq.m		1153.07	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
14-12-1	Providing and laying super white 3/4" (19mm) thick, 6"x12" size marble tiles floor fine dressed on surface without winding in ground floor and laid over 1" (25mm) thick cement sand mortar 1:2 setting tiles with portland cement slurry over cement mortar, jointing and washing the tiles with white cement slurry including curing, rubbing & polishing including the cost of cement mortar.	Sq.m	850.08	5389.56	
14-13-1	Deduct from item 14-12-1 above if Lasbella marble is used instead of super white marble	Sq.m		133.98	
14-14-1	Deduct from item 14-12-1 above if badal marble is used instead of super white marble	Sq.m		2361.70	
14-15-1	Providing and laying super white 1" (25mm) thick, marble floor in slabs exceeding 12"x12" marble size,fine dressed on surface without winding in ground floor and laid over 1" (25mm) thick cement sand mortar 1:2 setting tiles with portland cement slurry over cement mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing	Sq.m	850.08	5389.56	
14-16	Deduct from item 14-15-1 above if Lasbella marble is used instead of super white marble	Sq.m		133.98	
14-17	Deduct from item 14-15-1 above if badal marble is used instead of super white marble	Sq.m		2361.70	
14-18-1	Providing and laying 1" (25mm) thick super white marble slab exceeding 12"x12" size kitchen top in white cement including all labour for grinding and polishing	Sq.m	846.72	4365.46	
14-19-1	Deduct from item 14-18-1 above if Lasbella marble slab is used instead of super white marble	Sq.m		133.98	
14-20-1	Deduct from item 14-18-1 above if badal marble slab is used instead of super white marble	Sq.m		2361.70	
14-21-1	Providing and fixing copper clamps or panel dividing strips and/or dowel bars 1/4" (6 mm) dia of copper 1.21 mm thick 22 gauge of required length and shape for securing marble tiles/slabs in stairs/steps or in floor at any height.	Kg.	581.76	3257.45	
14-22-1	Extra for making nosing of treads as per design and/or as per instructions of the Engineer-in charge including grinding marble/marble chips and polishing etc.	R.M.	276.48		
14-23	Deduct for laying floor of any description in cement mortar ratio other than cement mortar 1:2 in item no. 14-9 to 14-18 -1				
a)	1 : 3	Sq.m		205.89	
b)	1 : 4	Sq.m		310.29	
14-24	Extra over item 14-9 to 14-22-1 for the description of work given below:				
a)	Extra for stair/steps	Sq.m	283.20		
b)	Extra for basement	Sq.m	53.40		
c)	Extra for first floor	Sq.m	74.76		
d)	Extra for every additional floor above first floor	Sq.m	64.08		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
14-25 a)	Providing and laying 1/4" to 3/8" (6mm to 9mm) thick Glazed/ Matt tiles of any colour and size in ground floor laid over 1" (25mm) thick cement sand mortar base including jointing and washing the tiles with white cement slurry of matching color by using color pigment and curing.	Sq.m	957.60	4994.83	
b)	Extra for basement over item 14-25(a) above	Sq.m	42.72		
c)	Extra for first floor over item 14-25(a) above	Sq.m	53.40		
d)	Extra for every additional floor above first floor over item 14-25(a) above	Sq.m	32.04		
14-26 a)	Providing and laying 3/4" (19mm) thick mosaic tiles 8"x 8" size with 3/8" (9mm) thick topping and base each in white cement with pigment of required color, shade and pattern in ground floor over 1" (25mm) thick cement sand mortar 1:2 including setting the tiles with portland cement slurry over cement sand jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & mortar cost.	Sq.m	768.72	4031.71	
b)	Same as item no.14-26(a) but using 1/2" (13 mm) thick mosaic tiles	Sq.m	768.72	3760.81	
14-27-1	Providing and laying 1" (25mm) thick mosaic tiles 12"x 12" size with 1/2" (13mm) thick topping and base each in white cement with pigment of required color, shade and pattern in ground floor over 1" (25mm) thick cement sand mortar 1:2 including setting the tiles with portland cement slurry over cement sand jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & the mortar cost.	Sq.m	701.28	2025.83	
14-28-1	Providing and laying 1-1/2" (37mm) thick mosaic tiles 16"x16" size with 1" (25mm) thick topping and 1/2" (13mm) thick base in white cement with pigment of required color, shade and pattern in ground floor over 1" (25mm) thick cement sand mortar 1:2 including setting the tiles with portland cement slurry over cement sand jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & the mortar cost.	Sq.m	701.28	5020.27	
14-29-1	Providing and laying 3/4" (19mm) thick cement tiles floor 8"x8" size with 3/8" (9mm) thick topping in white cement with pigment of required color shade and/or flowered pattern in ground floor over 1" (25mm) thick cement sand mortar 1:2 including setting the tiles with portland cement slurry, jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & the mortar cost.	Sq.m	768.72	2541.13	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
14-30-1	Providing and laying 1" (25mm) thick cement tiles floor 12"x12" size with 1/2" (13mm) thick topping in white cement with pigment of required color shade and/or flowered pattern in ground floor over 1" (25mm) thick cement sand mortar 1:2 including setting the tiles with portland cement slurry, jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & the mortar cost.	Sq.m	701.28	2611.73	
14-31-1	Providing and laying 1-1/2" (38mm) thick cement tiles floor 16"x16" size with 1/2" (13mm) thick topping in white cement with pigment of required color shade and/or flowered pattern in ground floor over 1" (25mm) thick cement sand mortar 1:2 including setting the tiles with portland cement slurry, jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & the mortar cost.	Sq.m	701.28	3189.49	
14-32	Extra over item No.14-26-1 to 14-31-1 for the description of work given below				
a)	Extra for flooring in basement	Sq.m	42.72		
b)	Extra for first floor	Sq.m	53.40		
c)	Extra for every additional floor above first floor	Sq.m	32.04		
14-33	Providing and laying floor of flexible polyvinyl chloride (P.V.C) tiles of Decora or any approved make and shade in ground floor including fixing with approved adhesive, 1-1/2" (37mm) thick sub base of 1:2:4 cement concrete and its curing.				
a)	P.V.C. tiles 305 mm x 305 mm x 2 mm flooring	Sq.m	955.44	4538.26	
b)	P.V.C. tiles 305 mm x 305 mm x 3 mm flooring	Sq.m	955.44	5216.14	
14-34	Providing and laying floor of marble coloured flexible polyvinyl chloride (PVC) Royal quality tiles of Decora or any approved make and shade in ground floor including fixing with approved adhesive,1-1/2" (37mm) thick sub base of 1:2:4 cement concrete & its curing.				
a)	P.V.C. tiles 305 mm x 305 mm x 1.8 mm flooring	Sq.m	955.44	3338.74	
b)	P.V.C. tiles 305 mm x 305 mm x 3 mm flooring	Sq.m	955.44	3590.74	
14-35	Extra over item 14-33 to 14-34 for the detail of work given below:				
a)	Extra for basement	Sq.m	42.72		
b)	Extra for first floor	Sq.m	53.40		
c)	Extra for every additional floor above first floor	Sq.m	48.06		
14-36-1	Providing and laying floor of first class burnt bricks laid on edge and jointed in cement mortar 1:6 and pointed with cement sand mortar 1:3 in ground floor including curing.	Sq.m	763.56	2556.35	
14-37-1	Providing and laying floor of first class burnt bricks laid flat and jointed in cement mortar 1:6 and pointed with cement sand mortar 1:3 in ground floor including curing.	Sq.m	567.90	1660.77	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
14-38-1	Providing and laying floor of first class burnt tiles 12"x6"x2" nominal size laid flat and jointed in cement mortar 1:6 and pointed with cement sand mortar 1:3 in ground floor including curing.	Sq.m	495.18	1419.61	
14-39-1	Providing and laying floor of first class burnt tiles 9"x4.5"x1.5" nominal size laid flat and jointed in cement mortar 1:6 and pointed with cement sand mortar 1:3 in ground floor including curing.	Sq.m	495.18	1999.71	
14-40-1	Providing and laying dry burnt bricks on edge and joints filled with sand in ground floor	Sq.m	269.64	1569.88	
14-41-1	Providing and laying dry burnt bricks laid flat and joints filled with sand in ground floor	Sq.m	218.28	1036.67	
14-42	Extra over Items No.14-37-1 to 14-41-1 for the detail of work given below				
a)	Extra for flooring in basement	Sq.m	42.72		
b)	Extra for stair/steps in treads, risers & landings	Sq.m	49.44		
c)	Extra for first floor	Sq.m	53.40		
14-43-1	Providing glass strips 1/4" (5 mm) thick and 1-1/2" (37.5 mm) wide for dividing the terrazo/mosaic flooring into panels. The cost of fixing is deemed to have been taken in composite rate of respective item.	R.M.		26.40	
14-44-1	Providing, laying, watering and compacting brick ballast 2" (50 mm) and down gauge mixed with 25% sand for floor foundation.	Cu.m	1561.20	5602.02	
14-45-1	Grouting dry brick laid upto 4-1/2" (115 mm) nominal thick brick work with cement sand mortar 1:5	Sq.m	145.44	388.41	
14-46 a)	Grinding, rubbing and polishing of any kind of floor including filling the voids with same material and removing uneveness in surface	Sq.m	301.20	352.26	
b)	Polishing old chips and marble tiles	Sq.m	255.72	294.91	
c)	Extra over item 14-46 (a) & (b) for first floor	Sq.m	21.36		
14-47	Providing and fixing best quality shisham wood block flooring in required pattern and cut to the required sizes in any floor including fixing on a layer of bitumen and sand mixed in the proportion of 10 kg./Sq.m. of bitumen with 0.1 Cu.m./10 Sq.m. sand laid over 3/4" (19mm) thick 1:4 cement sand mortar including curing				
a)	1" (25 mm) nominal thick wooden floor	Sq.m	2928.12	11549.78	
b)	1.25" (32 mm) nominal thick wooden floor	Sq.m	2928.12	13817.58	
14-48	Providing and fixing best quality shesham wood flooring using planks including fixing with brass screws on deodar wood frame and battens 1.5" x 2" (37mm x 50mm) placed at 12" (300mm) c/c, spacers at filling the gap between planks and concrete base with bitumen and sand mixed in the ratio of 7.2 kg bitumen in 0.05 Cu.m. sand in any floor.				
a)	1/2" (13 mm) nominal thick wooden floor	Sq.m	1774.08	13488.35	
b)	3/4" (19 mm) nominal thick wooden floor	Sq.m	1774.08	15399.65	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
14-49	Providing and laying dado/skirting with cement sand mortar in ground floor including finishing smooth with a floating coat of neat cement, rounding corners and curing				
a)	1/2" (13 mm) thick				
i)	Cement sand mortar 1 : 2	Sq.m	610.20	1071.41	
ii)	Cement sand mortar 1 : 3	Sq.m	610.20	962.74	
b)	3/4" (19 mm) thick				
i)	Cement sand mortar 1 : 2	Sq.m	620.88	1245.54	
ii)	Cement sand mortar 1 : 3	Sq.m	620.88	1086.71	
c)	Extra if topping is not less than 1/16" (1.6 mm)thick of approved color and shade is used and pigment in grey cement is required	Sq.m	10.68	16.04	
14-50	Providing and laying terrazzo dado/ skirting 7/8" (22mm) thick comprising 3/8" (9mm) thick topping 1:2 (one grey cement & two marble chips) in ground floor over 1/2" (13mm) thick cement sand mortar base 1:4 with grinding, rubbing, polishing & curing.				
a)	7/8" (22 mm) dado/skirting	Sq.m	1120.92	2368.46	
b)	Extra if 1/2" (13 mm) thick topping is used	Sq.m	4.28	297.57	
c)	Extra if white cement is used for 1/8" (3.2 mm) terrazo thickness	Sq.m		74.88	
d)	Extra if color pigment is used for 1/8" (3.2 mm) terrazo thickness	Sq.m	3.56	9.56	
14-51-1	Providing and laying dado/skirting 3/4" (19mm) thick comprising 1/4" (6mm) thick white cement plaster 1:3 as topping in ground floor over 1/2" (13mm) thick cement sand mortar 1:4 including finishing smooth & curing.	Sq.m	790.98	1503.78	
14-52	Providing and laying stone-lithic dado/skirthing 7/8" (22mm) thick comprising 3/8" (9mm) thick topping 1:3 using equal parts of 1/8" to 1/4" screenings without sand over 1/2" thick cement sand mortar base 1:4 in ground floor including curing, rubbing with carborandum stone & polishing.				
a)	7/8" (22 mm) stone lithic skirting	Sq.m	512.82	753.46	
b)	Extra if 1/2" (13 mm) thick topping is used	Sq.m	46.02	74.60	
14-53 a)	Extra for dado/skirting of any description for basement floors over item No. 14-51 and 14-52	Sq.m	53.40		
b)	Extra for dado/skirting of any description for first floor over item No. 14-51 and 14-52	Sq.m	64.08		
c)	Extra for dado/skirting of any description for every additional floor over item No. 14-51 and 14-52	Sq.m	53.40		
14-54 a)	Providing and fixing 3/8" (9mm) thick super white marble tiles dressed on the surface in dado/skirting and facing in ground floor over 1/2" (13mm) thick base of cement sand mortar 1:3, setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tiles with white cement slurry, curing, finishing, grinding, cleaning & polishing.	Sq.m	853.44	3583.43	
b)	Deduct from item 14-54(a) above if Lasbela marble is used instead of super white marble	Sq.m		-243.60	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
c)	Deduct from item 14-54(a) above if Badal marble is used instead of super white marble	Sq.m		1400.70	
14-55	Extra for dado/skirting of any description				
a)	Extra for basement	Sq.m	53.40		
b)	Extra for first floor	Sq.m	74.76		
c)	Extra for every additional floor above first floor	Sq.m	64.08		
d)	Extra for every 10 ft (3 m) height or part thereof in external facing	Sq.m	410.88		
14-56-1	Providing and laying ashlar, rough tooled or block in coursed stone facing upto 4" (100 mm) nominal thickness in cement mortar 1:3 upto a height of 10 ft (3 m) including curing on external face.	Sq.m	872.64	1537.53	
14-57-1	Providing and laying ashlar, fine stone facing upto 3" (75 mm) thick in cement mortar 1:3 upto a height of 10 ft (3 m) including curing on external face.	Sq.m	1043.52	1708.41	
14-58-1	Providing and laying coursed rubble stone facing upto 4" (100mm) thick in cement mortar 1:3 upto a height of 10 ft (3 m) including curing on external face.	Sq.m	922.86	1624.52	
14-59-1	Providing and laying un-coursed rubble stone facing upto 4" (100mm) thick in cement mortar 1:3 upto a height of 10 ft (3m) including curing on external face	Sq.m	360.42	1176.68	
14-60-1	Providing and laying random rubble stone facing upto 4" (100mm) thick in cement mortar 1:3 upto a height of 10 ft (3 m) including curing on external face	Sq.m	914.70	1675.86	
14-61-1	Extra for every additional 10 ft (3 m) height or part thereof on external face work over item No. 14-56-1 to 14-60-1	Sq.m	864.48		
14-62	Extra for providing and fixing iron lugs of required length and shape for securing stone facing with the wall surface of all kinds in any floor including the cost of making holes in the wall & grouting with cement mortar 1:2	Kg.	702.06	1124.49	
14-63-1	Providing and fixing dowel bars 1/4" (6 mm) dia of required length and shape for securing marble wall lining on any surface in any floor including the cost of drilling holes in marble tiles and wall & grouting with cement mortar 1:2	Kg.	1501.20	1782.56	
14-64 a)	Providing and fixing 1/4" to 3/8" (6mm to 9mm) thick Ceramic Glazed/Matt tiles (Prime Quality) of any colour and size, as directed by Engineer-in-Charge in dado/skirting in ground floor over 1/2" (13mm) thick base of cement mortar 1:3, setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tiles with white cement slurry of matching color, cleaning & curing.	Sq.m	539.52	4123.17	
b)	Extra for basement over item 14-64(a) above	Sq.m	42.72		
c)	Extra for first floor over item 14-64(a) above	Sq.m	53.40		
d)	Extra for every additional floor above first floor over item 14-64(a)	Sq.m	37.38		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
14-65 a)	Providing and laying 3/4"(19mm) thick mosaic tiles 6"x 6" size dado/skirting of approved design in any color, shade and pattern in ground floor over 3/8" thick base cement sand mortar 1:3 including setting the tiles with portland cement slurry over cement sand jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & mortar cost.	Sq.m	896.28	3737.56	
b)	Extra for dado/skirting in basement	Sq.m	53.40		
c)	Extra for dado/skirting in first floor	Sq.m	74.76		
d)	Extra for dado/skirting in every additional floor above first floor	Sq.m	64.08		
14-66 a)	Providing and fixing 3/4" (19mm) thick cement tiles 6"x 6" size, dado/skirting of approved design in any color, shade or flowered pattern in ground floor over 1/2" (13mm) thick cement sand mortar 1:3 including setting the tiles with portland cement slurry, jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & mortar cost.	Sq.m	896.28	2345.92	
b)	Extra for dado/skirting in basement	Sq.m	53.40		
c)	Extra for dado/skirting in first floor	Sq.m	74.76		
d)	Providing and fixing 3/4" (19mm) thick cement tiles 6"x 6" size, dado/skirting of approved design in any color, shade or flowered pattern in ground floor over 1/2" (13mm) thick cement sand mortar 1:3 including setting the tiles with portland cement slurry, jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & mortar cost.	Sq.m	64.08		
14-67	Providing and fixing flexible Polyvinyl chloride (PVC) tiles dado/skirting of Decora or any approved make and shade in ground floor including fixing with approved adhesive including 1/2" (13mm) thick cement sand plaster base 1:3, finishing, cleaning & curing.				
a)	P.V.C. tiles 305mm x 305mm x 2mm	Sq.m	651.12	3902.54	
b)	Marble colored P.V.C. tiles 305mm x 305mm x 1.8mm for dado/skirting	Sq.m	651.12	2731.58	
c)	Extra for dado/skirting in basement	Sq.m	196.51		
d)	Extra for dado/skirting in first floor	Sq.m	212.53		
e)	Extra for dado/skirting in every additional floor above first floor	Sq.m	208.26		
14-68	Providing and laying 1:2:4 P.C.C roof screeding using crushed stone 3/4" (19mm) including formwork, consolidation, finishing and curing				
a)	1-1/2" (37.5mm) nominal thick P.C.C. roof screeding	Sq.m	312.35	820.30	
b)	2" (50mm) nominal thick P.C.C. roof screeding	Sq.m	388.71	1130.22	
c)	3" (75mm) nominal thick P.C.C. roof screeding	Sq.m	476.28	1484.74	
d)	Extra for first floor	Sq.m	384.48		
e)	Extra for every additional floor above first floor	Sq.m	185.83		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
14-69	Providing and laying glass strips upto 1" (25 mm) thick of any section in floors of any description.				
a)	3 mm thick	R.M.	67.40	81.80	
b)	5 mm thick	R.M.	67.40	91.40	
14-70	Providing and laying 3/4"(19mm) thick Granite polished tiles of any size on floor of approved design in any color, shade and pattern in ground floor over 3/8" thick base cement sand mortar 1:3 including setting the tiles with portland cement slurry over cement sand jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & mortar cost.				
a)	Granite black (local)	Sq.m	1096.32	10927.72	
b)	Granite black (Danedar)	Sq.m	1096.32	10053.68	
c)	Granite Tropical	Sq.m	1096.32	6807.23	
d)	Granite Strawberry	Sq.m	1096.32	19028.85	
e)	Granite Super white	Sq.m	1096.32	15048.21	
f)	Granite baltic brown (Mylasian)	Sq.m	1096.32	20372.38	
g)	Granite camel brown (Mylasian)	Sq.m	1096.32	20372.38	
h)	Granite raw-silk (Mylasian)	Sq.m	1096.32	20372.38	
i)	Granite blue per (Mylasian)	Sq.m	1096.32	20372.38	
14-71 a)	Providing and laying 6-9mm thick Acid or Alkali Resistant tiles 12"x 12" size, on ground floor over 1" (25mm) thick cement sand mortar 1:2 including setting the tiles with portland cement slurry over cement sand including jointing and washing the tiles with acid proof cement slurry of matching color by using color pigment and curing	Sq.m	957.60	3639.19	
b)	Extra for basement over item 14-71(a) above	Sq.m	42.72		
c)	Extra for first floor over item 14-71(a) above	Sq.m	53.40		
d)	Extra for every additional floor above first floor over item 14-71(a) above	Sq.m	32.04		
14-72 a)	Providing and fixing 6 - 9mm thick Acid or Alkali Resistant tiles 12"x 12" size, of any colour, in dado/skirting in ground floor over 1/2" (13mm) thick base of cement mortar 1:3, setting of tiles in slurry of grey cement over mortar base including filling the joints and washing the tiles with acid proof cement slurry of matching color, cleaning & curing.	Sq.m	873.72	3045.12	
b)	Extra for basement over item 14-72(a) above	Sq.m	42.72		
c)	Extra for first floor over item 14-72(a) above	Sq.m	53.40		
d)	Extra for every additional floor above first floor over item 14-72(a)	Sq.m	37.38		
14-73 a)	Providing and laying Vitrified/ Porcelain tiles in floor with different sizes, Glazed or Matt, local or imported as directed by the Engineer-In-Charge, laid with 6mm thick layer of cement based high polymer modified quick set tile adhesive (water based) with a Base Price= Rs. 2250 per Sq.M. (It may be noted that reduction in the rate shall be made accordingly if the cost of purchase of tile is less than the base price).	Sq.m	1163.52	4101.96	
b)	Extra for basement over item 14-73(a) above	Sq.m	42.72		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
c)	Extra for first floor over item 14-73(a) above	Sq.m	53.40		
d)	Extra for every additional floor above first floor over item 14-73(a)	Sq.m	37.38		
14-74 a)	Providing and laying Vitrified/ Porcelain tiles in dado/skirting on ground floor with different sizes, Glazed or Matt, local (master or equivalent as directed by the Engineer-In-Charge, laid with 6mm thick layer of cement based high polymer modified quick set tile adhesive (water based) with a Base Price= Rs. 2250 per Sq.M. (It may be noted that reduction in the rate shall be made accordingly if the cost of purchase of tile is less than the base price).	Sq.m	1299.36	4685.01	
b)	Extra for basement over item 14-72(a) above	Sq.m	42.72		
c)	Extra for first floor over item 14-72(a) above	Sq.m	53.40		
d)	Extra for every additional floor above first floor over item 14-72(a)	Sq.m	37.38		
14-75-1	Chemical Polish including grinding for marble, Granite etc. (for Maintaineous & Repair Works	Sq.m	197.76	286.82	
14-76	Add extra for respective payable item of ground floor				
a)	Extra for first floor	% Increase	10.00%		
b)	Extra for every additional floor above first floor	% Increase	7.50%		

SECTION – 15

FINISHING

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
15-1	Cement plaster using Coarse Sand on soffits of ceiling, cantilever slabs, sides and soffits of beams, in basement and ground floor including making edges, corners and curing.				
a)	1/2 inch (13mm) thick cement sand plaster				
i)	1 : 2	Sq.m	346.80	763.29	
ii)	1 : 3	Sq.m	346.80	613.37	
iii)	1 : 4	Sq.m	346.80	551.06	
b)	3/8 inch (9.5 mm.) thick cement sand plaster				
i)	1 : 2	Sq.m	346.80	649.25	
ii)	1 : 3	Sq.m	346.80	542.16	
iii)	1 : 4	Sq.m	346.80	497.66	
c)	1/4 inch (6.4 mm.) thick cement sand plaster				
i)	1 : 2	Sq.m	346.80	563.71	
ii)	1 : 3	Sq.m	346.80	488.76	
iii)	1 : 4	Sq.m	346.80	457.60	
15-2	3/8 inch (9.5mm) thick cement plaster using Coarse Sand on walls and columns in basement, plinth and ground floor including making edges, corners and curing.				
i)	1 : 2	Sq.m	291.12	590.78	
ii)	1 : 3	Sq.m	291.12	483.70	
iii)	1 : 4	Sq.m	291.12	439.19	
iv)	1 : 5	Sq.m	291.12	413.23	
v)	1 : 6	Sq.m	291.12	394.69	
15-3	1/2 inch (13mm) thick cement plaster using Coarse Sand on walls and columns in basement, plinth and ground floor including making edges, corners and curing.				
i)	Manual (Maximium Area 250 Sft)	Sq.m	307.14	721.64	
ii)	1 : 3	Sq.m	307.14	571.73	
iii)	1 : 4	Sq.m	307.14	509.42	
iv)	1 : 5	Sq.m	307.14	473.07	
v)	1 : 6	Sq.m	307.14	447.11	
15-4	3/4 inch (19mm) thick cement plaster using Coarse Sand on walls and columns in basement, plinth and ground floor including making edges, corners and curing.				
i)	1 : 2	Sq.m	317.82	932.43	
ii)	1 : 3	Sq.m	317.82	707.56	
iii)	1 : 4	Sq.m	317.82	614.10	
iv)	1 : 5	Sq.m	317.82	559.58	
v)	1 : 6	Sq.m	317.82	520.64	
15-5-1	Pebble dash plaster upto 10 m height above ground level with a mixture of washed pebble or crushed stone 6 mm to 12.5 mm nominal size, dashed over and including fresh plaster in two layers under layer 12 mm cement plaster 1:4 (1 cement : 4 coarse sand) and top layer 10 mm cement plaster with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement.	Sq.m	581.76	1005.30	
15-6-1	Extra for plaster of any description for every additional 5 ft.(1.5m.) height or part thereof beyond 15 ft. (4.5 m.)	Sq.m	37.38	46.35	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
15-7-1	Providing ornamental moulding of approved design at the junction of slabs and walls in cement sand mortar 1 : 3 using Coarse Sand with 1.125 inch (28.5mm) average thickness consisting of 1 inch (25mm) undercoat and 0.125 inch (3mm) thick finishing layer including curing in any floor	Sq.m	1909.92	2240.88	
15-8-1	Providing and applying 3/4" (19mm) thick rough cast cement rendering comprising 3/8" (9.5mm) topping of 1 : 2 (one part cement & two part crushed aggregate 3/8" and down gauge) and base of 3/8" (9.5mm) thick rough plaster 1:4 in plinth and ground floor including finishing	Sq.m	481.32	924.01	
15-9-1	Providing and applying 3/4" (19 mm) thick ornamental plaster with 1:3 cement sand mortar using Coarse Sand on walls, columns and slabs finished smooth in basement, plinth and first floor including curing	Sq.m	1199.04	1662.51	
15-10-1	Making drip course 1/2"x 3/8" (13mm x 9.5mm) size under R.C.C. or cement concrete coping and sun shades in all floors including cost of cement sand mortar 1:3 using Coarse Sand and curing	R.M.	64.92	71.56	
15-11-1	Making 1/2" (13mm) thick 1-1/2" to 2-1/2" (38mm to 64mm) wide plaster band with 1:3 cement sand mortar using Coarse Sand in all floors including curing.	R.M.	89.54	107.58	
15-12-1	Making 1/2" (13mm) thick plaster band upto 4" (100mm) wide with 1:3 cement sand mortar using Coarse Sand in all floors including curing.	R.M.	109.16	141.75	
15-13-1	Making 1/2" (13mm) thick 6" to 9" (150mm to 225mm) wide plaster band with 1:3 cement sand mortar using Coarse Sand in all floors including curing.	R.M.	133.40	191.50	
15-14-1	Providing and mixing water proofing agent in cement mortar of any description in any floor	Kg		198.00	
15-15-1	Providing and mixing retarding or wetting agent in cement sand mortar of any description in any floor	Kg		415.80	
15-16-1	Extra if false pointing is required with lime/surkhi or pigment on plastered surface of any description in any floor.	Sq.m	205.44	481.87	
15-17-1	Extra if ruled pointing is required to give stone appearance on plastered surface of any description in any floor	Sq.m	205.44	215.71	
15-18-1	Extra if deep cut grooves of approved size and design are made on plastered surface of any description in any floor	Sq.m	308.16	323.57	
15-19-1	Extra for using washing soda in cement mortar of any description.	Kg		362.88	
15-20-1	Providing and mixing pigment in cement mortar of any description in any floor.	Kg		25.44	
15-21	Extra for plaster of any description for overhead tank.				
a)	Upto 6 m. height.	Sq.m	239.52	251.50	
b)	Extra for every additional 5 ft.(1.5 m) height or part thereof	Sq.m	221.34	254.54	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
15-22	Providing and fixing expanded metal or wire net lathing with 3/4" (19mm) cement plaster 1:4 using Coarse Sand in three layers including curing in any floor.				
a)	With expanded metal 3/4" x 2-1/2" - 12 gauge (19mmx64mmx2.17mm)	Sq.m	3308.48	4565.98	
b)	With wire netting 1-1/2" (38mm) mesh - 18 gauge (1.4mm) thick	Sq.m	2525.28	3761.42	
15-23-1	Providing and applying 1/2" (13mm) thick 1 : 3 cement sand mortar under coat with mortar of plaster of paris or gypsum plaster in basement and ground floor including curing	Sq.m	307.14	678.54	
15-24	Providing and fixing gypsum board with wire nails to wooden frame to receive gypsum plaster finishing coat in basement and ground floor but excluding the cost of wooden frame.				
a)	1/4" (6.4 mm) thick gypsum board	Sq.m	480.00	1211.40	
b)	3/8" (9.5 mm) thick gypsum board	Sq.m	480.00	1400.40	
c)	1/2" (13 mm) thick gypsum board	Sq.m	480.00	1501.20	
15-25-1	Providing and fixing insulating fibre board 1/2" (13 mm) thick with wire nails to wooden frame to receive gypsum plaster finishing coat in basement and ground floor but excluding the cost of wooden frame.	Sq.m	480.00	3053.52	
15-26	Providing and applying 1/4" (6.4mm) thick gypsum plaster over a prepared base coat in basement and ground floor but excluding the cost of base coat.				
a)	1 : 4 (1 gypsum & 4 lime)	Sq.m	237.48	861.93	
b)	1 : 3 (1 gypsum & 3 lime)	Sq.m	237.48	873.05	
15-27	Providing and applying cement plaster 1:2 using Coarse Sand with curing				
a)	1/4" (6.4 mm) thick	Sq.m	265.44	468.78	
b)	1/2" (13 mm) thick	Sq.m	265.44	658.85	
15-28-1	Providing and laying 2" (50mm) thick stucco cement plaster 1:2:4 (1 cement, 2 sand, 4 crush 1/2" and down gauge) using Coarse Sand in basement and ground floor including curing.	Sq.m	635.16	1417.93	
15-29	Providing and laying machine sprayed plaster using cement and zero number marble chips over a prepared roughened base coat in basement and ground floor but excluding the cost of base coat.				
a)	1 : 1 (one cement and one marble chips)				
i)	1/2" Thick	Sq.m	173.52	1232.53	
ii)	1/4" Thick	Sq.m	173.52	709.95	
b)	1 : 1.5 (one cement and one & half marble chips)				
i)	1/2" Thick	Sq.m	173.52	1236.10	
ii)	1/4" Thick	Sq.m	173.52	711.73	
c)	1 : 2 (one cement and two marble chips)				
i)	1/2" Thick	Sq.m	173.52	1238.45	
ii)	1/4" Thick	Sq.m	173.52	712.93	
15-30-1	Providing floating coat of cement 1/32" (0.8 mm) thick including curing.	Sq.m	124.08	209.84	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
15-31	Providing gobri leeping upto 1/8 inches (3.2mm) thick mixed with cowdung and clay using one part cowdung and one part clay at any height and in any floor				
a)	On walls	Sq.m	49.20	53.90	
b)	Over floor or roof	Sq.m	36.36	40.42	
15-32	Mud plaster on walls mixed with cowdung, bhoosa and clay 1:1:2 (one part cowdung, one part bhoosa weighing 80 kg./cu.m. and two parts clay) in basement, plinth and ground floor.				
a)	1/2" (13 mm) thick	Sq.m	258.84	291.68	
b)	3/4" (19 mm) thick	Sq.m	280.20	324.05	
c)	1" (25 mm) thick	Sq.m	306.90	362.08	
d)	1.25" (32 mm) thick	Sq.m	333.60	400.02	
15-33	Mud plaster on floor mixed with cowdung, bhoosa and clay 1:1:2 (one part cowdung, one part bhoosa weighing 80 kg./cu.m. and two parts clay) in basement, plinth and ground floor.				
a)	1/2" (13 mm) thick	Sq.m	238.50	264.36	
b)	3/4" (19 mm) thick	Sq.m	249.18	285.25	
c)	1" (25 mm) thick	Sq.m	275.88	322.62	
d)	1.25" (32 mm) thick mud plaster	Sq.m	302.58	359.88	
e)	Extra over item 15-33 (a to d) for roof	Sq.m	102.72		
15-34	Extra for plaster work of any description on first floor.				
a)	Upto 1/2 inch (13 mm) thick	Sq.m	278.04	319.75	
b)	Above 1/2 inch (13 mm) and upto 1 inch (25 mm) thick	Sq.m	296.22	340.65	
c)	Above 1 inch (25 mm) thick	Sq.m	384.96	442.70	
15-35	Extra for every additional floor above first floor for plaster work of any description.				
a)	Upto 1/2 inch (13 mm) thick	Sq.m	241.68	277.93	
b)	Above 1/2 inch (13 mm) and upto 1 inch (25 mm) thick	Sq.m	259.86	298.84	
c)	Above 1 inch (25 mm) thick	Sq.m	272.70	313.61	
15-36	Pointing on brick work with cement sand mortar in plinth and ground floor including raking out joints and curing				
a)	Flush pointing in cement sand mortar				
i)	1 : 2	Sq.m	457.68	551.16	
ii)	1 : 3	Sq.m	457.68	524.65	
b)	Deep ruled pointing in cement sand mortar				
i)	1 : 2	Sq.m	594.48	765.40	
ii)	1 : 3	Sq.m	594.48	712.37	
c)	Tuck or weather struck pointing in cement sand mortar				
i)	1 : 2	Sq.m	453.60	617.47	
ii)	1 : 3	Sq.m	453.60	564.44	
d)	Extra for first floor	Sq.m	37.38		
e)	Extra for every additional floor above first floor.	Sq.m	26.70		
15-37	Pointing on cement concrete block work with cement sand mortar in plinth and ground floor including raking out joints and curing				
a)	Flush pointing in cement sand mortar				
i)	1 : 2	Sq.m	333.60	397.34	
ii)	1 : 3	Sq.m	333.60	371.33	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Deep ruled pointing in cement sand mortar				
i)	1 : 2	Sq.m	406.32	532.53	
ii)	1 : 3	Sq.m	406.32	492.76	
c)	Tuck or weather struck pointing in cement sand mortar				
i)	1 : 2	Sq.m	479.04	608.89	
ii)	1 : 3	Sq.m	479.04	569.11	
d)	Extra for first floor	Sq.m	32.04		
e)	Extra for every additional floor above first floor.	Sq.m	26.70		
15-38	Pointing on stone work with cement sand mortar using Coarse Sand in plinth and ground floor including raking out joints and curing				
a)	Flush pointing in cement sand mortar				
i)	1 : 2	Sq.m	395.64	556.62	
ii)	1 : 3	Sq.m	395.64	503.59	
b)	Deep ruled pointing in cement sand mortar				
i)	1 : 2	Sq.m	468.36	654.15	
ii)	1 : 3	Sq.m	468.36	593.17	
c)	Tuck or weather struck pointing in cement sand mortar				
i)	1 : 2	Sq.m	541.08	730.51	
ii)	1 : 3	Sq.m	541.08	669.52	
d)	Raised or cut pointing in cement sand mortar				
i)	1 : 2	Sq.m	613.80	785.68	
ii)	1 : 3	Sq.m	613.80	732.65	
e)	Extra for mixing pigment of required colour	Sq.m	21.36	22.56	
f)	Extra for first floor	Sq.m	106.80		
g)	Extra for every additional floor above first floor.	Sq.m	85.44		
15-39-1	Extra for ceiling plaster of any description in any floor for every 5 ft (1.5m) height or part thereof beyond 15 ft (4.5m) height	Sq.m	142.42	189.70	
15-40-1	Extra for wall plaster or pointing of any description in any floor for every 5 ft (1.5m) height or part thereof beyond 15 ft (4.5m) height	Sq.m	86.34	210.57	
15-41-1	Petty repairs, after removing the loose matter, to fire places, ceiling, soffits, walls, columns, beams and verandah including preparing surface and curing.	Sq.m	337.96	545.60	
15-42	Removing mud plaster & disposing of the rubbish.				
a)	From walls	Sq.m	42.72	44.86	
b)	From roof	Sq.m	32.04	33.64	
15-43-1	Removing cement or lime plaster of any thickness from ceiling and disposing of the rubbish in any floor	Sq.m	106.80	112.14	
15-44	Plastering in patches in cement sand mortar 1:4 including curing and scraping old damaged portions in regular shape and removal of rubbish from the site in ground floor				
a)	3/8 inch (9 mm) thick plastering	Sq.m	406.56	554.05	
b)	1/2 inch (13 mm) thick plastering	Sq.m	433.26	632.95	
c)	3/4 inch (19 mm) thick plastering	Sq.m	465.30	755.60	
d)	1 inch (25 mm) thick plastering	Sq.m	758.10	1171.67	
e)	Extra for patch plaster and finishing of any description on external face item.	Sq.m	72.72	76.36	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
f)	Extra for patch plaster and finishing of any description in basement and first floor.	Sq.m	42.72		
g)	Extra for patch plaster and finishing of any description in every additional floor above first floor.	Sq.m	32.04		
15-45	Supply and fixing of National tiles facing strips/chequered tiles on the plastered surface on exterior faces of building including labour, scaffoldings and removal of debris etc.				
a)	Glazed strip tiles	Sq.m	680.40	3394.55	
b)	Unglazed strip tiles	Sq.m	680.40	2371.43	
c)	Rough glazed strip tiles	Sq.m	680.40	2371.43	
15-46	Extra over respective payable items of ground floor				
a)	For first floor	%Increase	10.00%		
b)	For every additional floor above first floor	%Increase	7.50%		
15-47-1	Providing and fixing partitions upto ceiling height consisting of G.I frame and required board: 75 mm overall thickness of partition with 12.5 mm thick Plain Gypsum Board	Sq.m	1652.49	4258.59	
15-48-1	Providing and fixing of 2 mm thick corrugated (2.5" or 4.2" or 6") or step-down (2"or3"or 6") UV Stabilized Fiber Glass Reinforced Plastic Sheet roofing upto required pitch i/c fixing J or L hooks, bolts & nuts 8 mm dia. as specified	Sq.m	362.07	3483.30	
15-49 a)	Providing and fixing of 2 mm thick Flat UV Stabilized Fiber Glass Reinforced Plastic Sheet roofing upto required pitch i/c fixing J or L hooks, bolts & nuts 8 mm dia. as specified	Sq.m	362.07	2235.63	
b)	Providing and fixing of Heat Resistant Clear Poly Carbonate roof and window Shades in any colour and size i/c fixing MS frame and Supports as specified.	Sq.m	1232.64	3546.00	
15-50-1	P/L tiled false ceiling of size 595x595 mm metal grid of hot dipped galvanized steel sections.. GI Metal Ceiling Lay in plain Tegular edge Global white color tiles of size 595x595 mm with 20% area perforations	Sq.m	575.23	8545.15	
15-51	Providing and laying 3/4"(19mm) thick Granite polished slab including nosing on Kitchen and other tops of approved design over 3/8" thick base cement sand mortar 1:3 including setting the tiles with portland cement slurry over cement sand jointing and washing the tiles with cement slurry of matching color including grinding, rubbing, polishing & mortar cost.				
a)	Granite black (local)	Sq.m	1096.32	11241.75	
b)	Granite black (China)	Sq.m	1096.32	10337.57	
c)	Granite Red Rubi (Indian)	Sq.m	1096.32	6979.18	
d)	Granite Red chilli (Mylasian)	Sq.m	1096.32	19622.23	
e)	Granite Galaxy Black (Indian)	Sq.m	1096.32	15504.33	
f)	Granite baltic brown (Mylasian)	Sq.m	1096.32	21012.09	
g)	Granite camel brown (Mylasian)	Sq.m	1096.32	21012.09	
h)	Granite raw-silk (Mylasian)	Sq.m	1096.32	21012.09	
i)	Granite blue per (Mylasian)	Sq.m	1096.32	21012.09	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
j)	Extra for Wall Clading using S.S studs or other anchorage techniques	%age	15%	15%	
15-52	Providing and applying 0.75" (15 mm) thick cement sand plaster with Putzmeister plastering machine on walls, columns and slabs finished smooth in basement, plinth and first floor.	Sq.m			
a)	1 : 2	Sq.m	169.49	894.21	
b)	1 : 3	Sq.m	291.12	790.97	
c)	1 : 4	Sq.m	291.12	697.51	
d)	1 : 5	Sq.m	291.12	642.99	
e)	1 : 6	Sq.m	291.12	604.04	
15-53-1	Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building , for all heights and all levels etc. including: a) Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design. b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metalic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc. c) The fastening brackets of Aluminium/MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing	Sq.m	2886.46	6680.28	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
	to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material & labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium item.s The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. up to two decimal places				
15-54	Extra for Plaster of height above 12 ft but upto 24 ft on Ground Floor only	%Increase	0.15		
15-55	Providing and Fixing 3/4"(19mm) thick Sand Stone (Gadab Stone) on interior and exterior wall and cladding including with cement sand mortar 1:3 complete in all respects.				
a)	Sand Stone (Gadab Stone)	Sq.m	1096.32	4004.60	
15-56	Providing and Fixing 3/4"(19mm) thick Sand Stone (Zhob Stone) on interior and exterior wall and cladding including with cement sand mortar 1:3 complete in all respects.				
a)	Sand Stone (Zhob Stone)	Sq.m	1096.32	3316.07	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
15-57-1	Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 6-12- 6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthned clear float glass 6mm thick, spacer tube 12mm wide, dessicants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor. (Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No.26.2) For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm. (i) Coloured tinted float glass 6mm thick substrate with reflective soft coating on face # 2, + 12mm Airgap + 6mm Heat Strengthened clear Glass of approved make having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 degree K		26324.04	37990.71	
15-58	a) Providing and Fixing Face work with brick tiles (Gutka) on interior, exterior wall with cement sand mortar 1:3 includings ties and scafolding complete in all respects.				
i	2''x 2'' x 9''	Sq.m	1096.32	4278.95	
ii	3''x 3'' x 9''	Sq.m	1096.32	3546.36	
15-58	b) Providing and fixing Gypsum Board false ceiling of approved size and texture consisting of imported powder coated aluminum angle and tee framing (size 1" x 1") hunged by approved suspension system, including provision of extra framing for lights fittings, A/C diffusers and around columns, etc, complete in all respectas directed by the Engineer.				
i	1/4" (6.4 mm) thick laminated gypsum board	Sq.m	240.00	1417.47	
ii	1/2" thick laminated gypsum board	Sq.m	240.00	1443.93	
15-59	Providing and fixing Gypsum Board false ceiling of approved size and shape chunged by approved suspension system, including provision of extra framing for lights fittings, A/C diffusers and around columns, etc, complete in all respectas directed by the Engineer.				
a)	1/2"-3/4"(13 mm) thick 2' x 2' gypsum board	Sq.m	240.00	1536.54	
15-60	Providing and fixing Corian any size on tops of approved design in any color, shade and pattern in ground floor.				
a)	Plain	Sq.m	401.76	12710.94	
b)	Textured	Sq.m	401.76	18933.19	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
15-61	Providing and fixing PVC wall Panelling 9'' wide and 10 ft long including all accessories of approved design in any color, shade and pattern in ground floor.	Sq.m	540.00	1074.49	

SECTION – 16

WOOD AND PLASTIC WORK

1. NO EXTRA RATE IS TO BE PAID FOR SAWING

2. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-1	Providing and fixing plain wood work sawn, wrought planed in repair and replacement work including cost of nails and screws.				
a)	Deodar wood	Cu.m	74160.81	716967.44	
b)	Shisham wood	Cu.m	74160.81	371928.99	
c)	Kail wood	Cu.m	74160.81	291420.02	
16-2	Providing plain wood work for regulation karries or needles including sawing, plaining, wroughting, also providing & fixing steel strip end rods.				
a)	Deodar wood	Cu.m	42377.60	603471.53	
b)	Shisham wood	Cu.m	42377.60	313594.61	
c)	Kail wood	Cu.m	42377.60	232019.12	
16-3	Providing and fixing First class wood frames of required size for doors, windows, ventilators, clerestory windows, shelves, partitions, trellis (Jafri) work.				
a)	Deodar wood frame	Cu.m	20020.70	591402.28	
b)	Shisham wood frame	Cu.m	30044.63	295003.54	
16-4	Providing and fixing First class wood built in frame of required size with 1/2" (13mm) thick beading as stopper of the same for doors, windows, ventilators, windows, shelves and partitions.				
a)	Deodar wood frame	C.M	20200.60	638813.65	
b)	Kail wood frame	Cu.m	20200.60	230073.13	
c)	Teak wood frame	Cu.m	20200.60	1191165.70	
16-5	Providing, fixing and hoisting First class wood wrought and framed in trusses and other roof scantlings including all necessary iron work for fixing and anchoring in position.				
a)	Deodar wood	Cu.m	92921.23	732381.64	
b)	Kail wood	Cu.m	101896.71	351464.67	
16-6-1	Providing fixing and laying First class shisham wood of required section sawn and framed for dunnage with necessary iron work.	Cu.m	5216.68	280085.45	
16-7	Providing and fixing First class deodar wood shutters fully panelled with same wood and fixed with approved brass hinges and tower bolts.				
a)	2" (50 mm) thick fully panelled shutters.	Sq.m	3365.68	28847.05	
b)	1.75" (44 mm) thick fully panelled shutters.	Sq.m	3365.68	26446.36	
c)	1.5" (38 mm) thick fully panelled shutters.	Sq.m	3365.68	23969.53	
d)	1.25" (32 mm) thick fully panelled shutters.	Sq.m	3365.68	20148.89	
16-8	Providing and fixing 1.5" (38 mm) thick fully panelled First class deodar wood shutter fixed with ply/ hard board/ chip board/ Cement Fibre sheet and with approved nickle plated hinges and tower bolts.				
a)	Fixed with 5 ply (6 mm) teak wood ply	Sq.m	1138.13	15174.70	
b)	Fixed with 3 ply (3 mm) teak wood ply	Sq.m	1138.13	27009.32	
c)	Fixed with 5/16" (8 mm) thick hard board.	Sq.m	1138.13	14522.56	
d)	Fixed with 1/4" (6 mm) thick hard board.	Sq.m	1138.13	14867.45	
e)	Fixed with 3/16" (5 mm) thick hard board.	Sq.m	1138.13	14750.91	
f)	Fixed with 1/2" (13 mm) thick chip board (500 Kg./cu.m.)	Sq.m	1138.13	20369.49	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
g)	Fixed with 5 ply (6 mm) commercial ply	Sq.m	1138.13	15662.05	
h)	Fixed with 3 ply (3 mm) commercial ply	Sq.m	1138.13	15333.62	
i)	Fixed with 1/4" (6 mm) thick plain Cement Fibre sheet.	Sq.m	1138.13	23872.90	
16-9	Providing and fixing First class deodar wood shutters fully glazed with glass of approved quality and approved brass hinges, tower bolts, deodar wood beading and putty packing to glasses as required.				
a)	2" (50 mm) thick fully glazed shutters with 1/4" (6 mm) thick plain imported glass.				
i)	Glass to be provided	Sq.m	2891.31	20798.66	
ii)	Glass not included	Sq.m	2780.78	19846.46	
b)	1.75" (44 mm) thick fully glazed shutters with 1/4" (6mm) thick plain imported glass				
i)	Glass to be provided	Sq.m	2891.31	19209.01	
ii)	Glass not included	Sq.m	2780.78	18321.69	
c)	1.5" (38 mm) thick fully glazed shutters with 1/4" (5 mm) thick plain local glass				
i)	Glass to be provided	Sq.m	2891.31	17169.50	
ii)	Glass not included	Sq.m	2780.78	16381.69	
d)	1.25" (32mm) thick fully glazed shutters with 1/4" (5mm) thick plain local glass				
i)	Glass to be provided	Sq.m	2891.31	17452.21	
ii)	Glass not included	Sq.m	2780.78	16381.69	
e)	1" (25mm) thick fully glazed shutters with 1/4" (5mm) thick plain local glass				
i)	Glass to be provided	Sq.m	2891.31	19929.40	
ii)	Glass not included	Sq.m	2780.78	19194.46	
16-10	Providing and fixing First class deodar wood shutters partly panelled and partly glazed with plain glass of approved quality, brass hinges, tower bolts, deodar wood beading and putty packing for glass as required.				
a)	2" (50mm) thick partly panelled & partly glazed shutters with 1/4" (6mm) thick plain imported glass.				
i)	Glass to be provided	Sq.m	3640.96	24982.04	
ii)	Glass not included	Sq.m	3366.63	24130.98	
b)	1.75" (44mm) thick partly panelled and partly glazed shutters with 1/4" (6mm) thick plain imported glass				
i)	Glass to be provided	Sq.m	3640.96	20568.28	
ii)	Glass not included	Sq.m	3366.63	19834.05	
c)	1.5" (38mm) thick partly panelled partly glazed shutters with 1/4" (5mm) thick plain local glass				
i)	Glass to be provided	Sq.m	3640.96	18697.63	
ii)	Glass not included	Sq.m	3366.63	18180.30	
d)	1.25" (32mm) thick partly panelled partly glazed shutters with 1/4" (5mm) thick plain local glass				
i)	Glass to be provided	Sq.m	3640.96	21503.54	
ii)	Glass not included	Sq.m	3366.63	21058.31	
e)	1" (25mm) thick partly panelled partly glazed shutters with 1/4" (5mm) thick plain local glass				
i)	Glass to be provided	Sq.m	3640.96	19104.76	
ii)	Glass not included	Sq.m	3366.63	18637.78	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-11	Providing and fixing 1.5" (38mm) thick pressed veneered door shutters fully flushed with First class wood veneering on all faces and sides fixed over deodar wood cavited core and frame work of not less than 4" (100mm) wide strips all round with approved brass hinges, tower bolts as required.				
a)	Teak wood				
i)	Teak wood 3 Ply	Sq.m	1604.20	14081.04	
ii)	Teak wood 5 Ply	Sq.m	1604.20	14669.78	
b)	Shisham wood				
i)	Shisham wood 3 PLY	Sq.m	1604.20	15134.57	
ii)	Shisham wood 5 PLY	Sq.m	1604.20	16095.13	
c)	Commercial wood				
i)	Commercial wood 3 ply	Sq.m	1604.20	15134.57	
ii)	Commercial wood 5 ply	Sq.m	1604.20	16095.13	
16-12	Providing and fixing 1.5" (38 mm) thick pressed veneered door shutters fully flushed with First class wood veneering on all faces and sides fixed over partal wood cavited core and frame work of not less than 4" (100mm) wide strips all round with approved iron hinges, tower bolts as required.				
a)	Teak wood				
i)	Teak wood 3 Ply	Sq.m	1604.20	6470.02	
ii)	Teak wood 5 Ply	Sq.m	1604.20	7058.75	
b)	Shisham wood				
i)	Shisham wood 3 PLY	Sq.m	1604.20	7523.54	
ii)	Shisham wood 5 PLY	Sq.m	1604.20	8484.11	
c)	Commercial wood				
i)	Commercial wood 3 ply	Sq.m	1604.20	7523.54	
ii)	Commercial wood 5 ply	Sq.m	1604.20	8484.11	
16-13	Providing and fixing sliding shutters clad with plain galvanized iron sheet 24 gauge (1.05mm) on front face over wood frame work 2"x3" (50mmx75mm) pulleys 4" (100mm) dia. With guides of T- iron 2.5"x2.5"x0.25" (65mmx65mmx6mm) at top and bottom T-iron brackets to walls and top pulleys 2"x2"x0.25" (50mmx50mmx6mm) covering channels for pulleys embedding in cement concrete 1:2:4, bottom guide with rag bolts 6" (150mm) long including locking arrangements with handles.				
a)	Deodar wood frame	Sq.m	2225.93	18679.09	
b)	Kail wood frame	Sq.m	2225.93	13136.01	
16-14-1	Providing and fixing 1.25" (32mm) thick First class deodar wood sliding shutters fully glazed with 1/4" (6mm) thick glass panes including fixing guide rails, brass roller, same wood beading with putty packing, cutting and making good damage to walls and floors.	Sq.m	2627.48	16979.15	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-15-1	Providing and fixing 1.25" (32mm) thick First class deodar wood sliding shutters partly panelled and partly glazed with 1/4" (6mm) thick glass panes including fixing guide rails, brass roller, same wood beading with putty packing, cutting and making good damage to walls and floors.	Sq.m	2769.72	21591.17	
16-16	Providing and fixing 1.5" (38mm) thick pressed veneered sliding shutters fully flushed with wood veneering on all faces and sides fixed over deodar wood cavitied core and frame work of not less than 4" (100mm) wide strip all around including fixing guide rails,brass rollers, cutting and making good damages to walls and floor as required.				
a)	Teak wood 3 ply	Sq.m	2627.48	27875.29	
b)	Commercial wood 3 ply	Sq.m	2627.48	28904.58	
16-17	Providing and fixing 1.5" (38mm) thick pressed veneered sliding shutters partly glazed with glass panes 7.3kg/Sq.m. and partly veneered with wood veneering on all faces and sides fixed over deodar wood cavitied core and frame work of not less than 4" (100mm) wide strip all around including fixing guide rails, brass rollers, deodar wood beading with putty packing to glasses, cutting and making good damages to walls and floors as required but excluding the cost of extra glazing and grills sand witched between glasses as required.				
a)	Teak wood 3 ply	Sq.m	2627.48	21770.61	
b)	Commercial wood 3 ply	Sq.m	2627.48	22653.63	
16-18 a)	Providing and fixing 1-1/2" (38mm) thick First class deodar wood shutters having 3/4" (19mm) thick batten, ledges and bracing battened, ledged and braced, making rebated or tongued and grooved joints with approved T- iron hinges and tower bolts as required.	Sq.m	1804.69	11164.31	
b)	Providing and fixing 1-1/2" (38mm) thick Teak wood shutters having 3/4" (19mm) thick batten, ledges and bracing battened, ledged and braced, making rebated or tongued and grooved joints with approved T- iron hinges and tower bolts as required.	Sq.m	1804.69	19069.62	
16-19-1	Providing and fixing 1.5" (38mm) thick First class deodar wood shutters fully fitted with iron bars 5/8" (16mm) dia at 4" (100mm) c/c including cost of iron bars, approved iron hinges, tower bolts as required.	Sq.m	1589.65	20337.93	
16-20-1	Providing and fixing 1.5" (38mm) thick First class deodar wood shutters fully wire gauzed with galvanized iron wire gauze 24 gauge (1.06mm) and 12 mesh to 1" (25mm) with approved S.S butt hinges and tower bolts as required.	Sq.m	1405.19	20730.51	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-21-1	Providing and fixing 1.25" (32mm) thick First class deodar wood shutters partly wire gauzed with galvanized iron wire gauze 24 gauge (1.06mm) and 12 mesh to an inch (25mm) and partly panelled with deodar wood, approved S.S butt hinges and tower bolts as required	Sq.m	1923.33	19848.35	
16-22-1	Providing and fixing 1.25" (32mm) thick First class deodar wood shutters fully fixed with expanded metal of 3/4"x2.5" (19mmx64mm) mesh 12 gauge (2.12mm) with approved S.S butt hinges and tower bolts as required	Sq.m	1405.19	18070.90	
16-23-1	Providing and fixing 1.25" (32mm) thick First class deodar wood stair case fixed glazing with glass panes 24 oz.(7.3 kg/sq.m.) deodar wood beading and putty packing as required.	Sq.m	2793.22	17214.27	
16-24	Providing and fixing 1.25" (32mm) thick First class deodar wood swing shutters fully panelled including iron helical spring hinges as required.				
a)	Panelled with deodar wood	Sq.m	3127.78	20005.16	
b)	Panelled with 5/16" (8 mm) hard board	Sq.m	1667.49	15155.74	
16-25-1	Providing and fixing 1.25" (32mm) thick First class deodar wood swing shutters fully glazed with glass panes 5mm thick, deodar wood beading with putty packing to glasses with iron helical spring hinges as required.	Sq.m	2589.78	16784.25	
16-26-1	Providing and fixing 1.25" (32mm) thick pressed veneered swing shutters fully flushed with teakwood veneering 1/8" (3mm) thick on all faces and sides fixed over deodar wood cavitied core framework of not less than 4" (100mm) wide strip allround with brass double action helical spring hinges as required.	Sq.m	1756.03	20501.95	
16-27	Providing and fixing First class deodar wood trellis work (jafri) with battens forming aperatures 1.5"x1.5" (38mmx38 mm) but excluding cost of frame work as required.				
16-27 a)	3/8" x 1.5" (9 mm x 38 mm) battens forming aperature	Sq.ft	1090.16	6390.35	
b)	1/2" x 1.5" (13 mm x 38 mm) battens forming aperature	Sq.m	1090.16	8125.20	
c)	Extra over item 16-27 (a or b) for providing doors or windows frame 2"x1.5" (50mmx32mm) in trellis (jafri) work of First class deodar wood including cost of wood work approved iron hinges and tower bolts (clear opening to be measured).	Sq.m	883.86	8822.51	
16-28-1	Providing and fixing 1.25" (32mm) thick First class deodar wood partition fully panelled with the same wood as required	Sq.m	2343.99	14585.39	
16-29-1	Providing and fixing 1.25" (32mm) thick First class deodar wood partition fully glazed with glass panes 6 mm with deodar wood beading with putty packing to glasses as required.	Sq.m	2528.73	10293.46	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-30-1	Providing and fixing wooden partition fully flushed with hard board 5/16" (8mm) thick on one face fixed on First class deodar wood frame 3"x1.25" (75mmx32mm) at spacing not exceeding 24" (600mm) horizontal and 18" (450mm) vertical including necessary wooden beading as required.	Sq.m	1404.70	8912.42	
16-31-1	Providing and fixing wooden partition fully flushed with hard board 5/16" (8mm) thick on both faces fixed on partal wood frame 3"x1.25" (75 mm x 32 mm) at spacing not exceeding 24" (600 mm) horizontal and 18" (450 mm) vertical including necessary wooden beading as required.	Sq.m	1404.70	5155.46	
16-32-1	Providing and fixing 2" (50mm) thick First class deodar wood shutters framed (2"x2.5") braced and flushed with plain G.I. sheet 24 gauge (1.05mm) for garrage and godown including cost of male and female hinges, locking arrangement and other iron fittings, cutting walls and making good the same as required.	Sq.m	2585.95	11835.83	
16-33-1	Providing and fixing 2" (50mm) thick First class deodar wood fully panelled shutters for garrage and/or godown including cost of male and female hinges, locking arrangement and other iron fittings, cutting walls and making good the same as required.	Sq.m	3271.90	24263.22	
16-34-1	Providing and fixing First class deodar wood 3" thick gate as per design approved by the Engineer in charge with necessary male and female hinges, stopper, locking arrangements, cutting wall and making good the same as required.	Sq.m	2233.78	28284.43	
16-35-1	Providing and fixing 3/4" (19mm) thick First class deodar wood tongued and grooved plain boarding, or lining on walls, jambs, skirting, cornice, chair rails and archivolt fixed on deodar wood frame backing with rawl plugs on screws, but excluding cost of backing and polishing as required.	Sq.m	2922.76	14219.94	
16-36-1	Providing and fixing 1/2" (13mm) thick First class deodar wood panelling in framework 3"x1.5" (75mmx38mm) of same wood on walls, jambs, skirting, cornice, chair rails and archivolt fixed on framed deodar wood backing with rawl plugs or screws but excluding the cost of backing and polishing as required.	Sq.m	2617.52	13340.77	
16-37-1	Providing and fixing 1" (25mm) deodar wood frame backing of approved shape and section in wall panelling or lining, skirting, cornice, chair rails and archivolt fixed with screws or rawl plugs as required.	Cu.m	32623.67	584925.80	
16-38-1	Providing and fixing 1" (2 mm) deodar wood planking in shelves, almirahs with deodar wood batten 1"x1.5" (25mmx38mm) fixed in walls with screws or rawl plugs as required.	Sq.m	465.64	15921.03	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-39-1	Providing and fixing 1" (25mm) deodar wood planking in shelves on deodar wood brackets each having cross sectional area approx. 4 sq.inches (26 sq.cm.) and spaced at 4 ft. (1.2m) c/c fixed to walls with screws or rawl plugs as required.	Sq.m	612.19	19527.03	
16-40	Providing and fixing G.I. wire gauze of 22 gauze (1.15 mm) and 144 mesh per sq.inch.				
a)	With First class deodar wood beading upto one square inch (6.45 sq.cm.) 2"x1/2" section of approved design with iron screws over existing frame as required.	Sq.m	316.88	6488.37	
b)	Without beading	Sq.m	95.06	4943.52	
16-41	Providing and fixing plastic wire gauze of and 22 mesh per sq.inch.				
a)	With First class deodar wood beading 2" x 1/2" over existing frame	Sq.m	316.88	2353.30	
b)	Without beading	Sq.m	95.06	808.45	
16-42	Providing and fixing Aluminium wire gauze 30 gauge (0.85 mm) and 14 mesh per sq.inch.				
a)	With First class deodar wood beading 2" x 1/2" over existing frame	Sq.m	316.88	2963.39	
b)	Without beading	Sq.m	95.06	1418.54	
16-43-1	Providing and fixing expanded metal 3/4"x2.5" (19mm x 64mm), 12 gauge (2.12mm) of approved quality with First class deodar wood beading upto one sq.inch (2"x1/2") as required and 22 mesh per sq.inch.	Sq.m	316.88	4725.88	
16-44-1	Providing and fixing with sunken iron screws over existing base of iron or wood First class shisham wood moulding as hand rails, studs, lathe etc. of approved design 4 to 6 sq.inch (26 to 39 sq.cm.) in cross section as required.	R.M	643.73	1979.18	
16-45-1	Providing and fixing with sunken iron screws over existing base of iron or wood First class deodar wood moulding as hand rails, studs, lathe etc. of approved design 4 to 6 sq.inch (26 to 39 sq.cm.) in cross section as required.	R.M	640.16	3268.69	
16-46-1	Providing and fixing with sunken iron screws and rawl plugs First class shisham wood moulded picture rails upto 6sq.inch (39 sq.cm.) in cross section on walls as required.	R.M	230.15	1575.82	
16-47-1	Providing and fixing with sunken iron screws and rawl plugs First class deodar wood moulded picture rails upto 6sq.inch (39 sq.cm.) in cross section on walls.	R.M	324.66	3146.79	
16-48-1	Providing and fixing with iron screws 3/4" (19 mm) thick First class deodar wood eave or barge board.	Sq.m	773.69	12085.11	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-49	Providing and fixing First class wood railing of approved design and sections in stair cases, balcony or parapet with same wood balusters of approved design and sections fixed into stringers, steps or walls having hand rail with turning, bend posts, newal posts fixed with flat iron and screws including cutting holes in stringers walls steps and making good as required but excluding cost of stringers, steps and flat iron.				
a)	Shisham wood	Sq.m	2723.26	6918.81	
b)	Deodar wood	Sq.m	2419.83	11369.34	
16-50	Providing and fixing First class wood in stairs with or without stringers and landing joists including cost of moulded nosing and stringers, cutting grooves for fixing steps planks with screws, bolts etc. but excluding cost of balustrade.	Sq.m			
a)	Shisham wood	Sq.m	3425.98	29432.71	
b)	Deodar wood	Sq.m	3024.72	58336.72	
16-51-1	Providing and fixing 1" (25mm) thick fine cork sheet with aproved adhesive to shutters and frame for sound proofing and/or for airconditioning shutters including levelling, finishing.	Sq.m	922.29	8272.08	
16-52-1	Providing and fixing 3/4" (19mm) thick foam rubber sheet with aproved adhesive and edge metalling screwed to shutters and frame for sound proofing and/or for airconditioning shutters including levelling, finishing, polishing metal portion.	Sq.m	2775.50	6238.05	
16-53-1	Providing and fixing 1/2" (13mm) thick `Namda' with approved adhesive and edge metalling screwed to shutters and frame for sound proofing and/or for airconditioning shutters including levelling, finishing, polishing metal portion.	Sq.m	2511.99	5774.88	
16-54-1	Providing and fixing First class deodar wood projected beading upto one sq.inch.(6.5 sq.cm.) wide in section, designed, fixed around the panels of doors, windows of any description.	R.M	146.15	360.26	
16-55-1	Providing and fixing 1/2" (13mm) thick First class deodar wood simple moulded or plain pelmet fixed with iron frame 3/4"x3/4"x1/4" with screws including cost of painting three coats on iron work only with approved anti-corrosive paints.	R.M	2870.44	10897.19	
16-56-1	Providing and fixing 1/2" (13mm) thick First class deodar wood simple moulded or plain pelmet fixed with same wood brackets, screws, rawl plugs etc.	Sq.m	2693.64	10516.92	
16-57-1	Providing and fixing 1.25" (32mm) thick deodar wood First class wooden brackets for holding curtain rods moulded to details, fixed to wall or wood with screws, rawl plugs etc.	Sq.m	8552.66	27221.45	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-58	Providing and fixing 3/4" (19mm) thick First class wood peg boards with levelled edges pegs of approved design fixed at 10" (250mm) centre to centre with screws and rawl pegs.				
a)	Shisham wood with brass pegs	Sq.m	3173.48	10089.05	
b)	Shisham wood with iron pegs	Sq.m	3173.48	9400.41	
c)	Deodar wood with brass pegs	Sq.m	2456.15	16986.83	
d	Deodar wood with iron pegs	Sq.m	2456.15	16298.19	
16-59-1	Providing and fixing deodar wood First class wooden curtain rods 1" to 1.25" (25mm to 32mm) dia with end stay.	R.M	143.00	674.27	
16-60	Providing and fixing 3/4" (19mm) dia. approved tubes with sockets as curtain rods.				
a)	Brass tube with brass socket	R.M	143.00	1281.70	
b)	Chromium plated tube with C.P. socket	R.M	143.00	1398.69	
16-61	Providing and fixing curtain rails with double roller runners, clamps, including cost of C.P. brass screws and rawl plugs.				
a)	C.P. brass curtain rails	R.M	381.35	3704.51	
b)	Aluminium curtain rails	R.M	381.35	4043.50	
16-62	Providing and fixing approved rings for curtain.				
a)	Brass rings				
i)	Brass rings 1.25" (32 mm) dia.	Each	3.20	7.40	
ii)	Brass rings 1" (25 mm) dia.	Each	3.20	6.80	
b)	Chromium plated rings				
i)	Chromium plated rings 1.25" (32 mm) dia.	Each	3.20	6.20	
ii)	Chromium plated rings 1" (25 mm) dia.	Each	3.20	5.60	
c)	Plastic rings				
i)	Plastic rings 1.25" (32 mm) dia.	Each	3.20	4.40	
ii)	Plastic rings 1" (25 mm) dia.	Each	3.20	4.40	
16-63	Providing and fixing approved quality heavy duty window stay (casement) with 1.25" (32mm) screw.				
a)	Brass 9" (225 mm) long window stay fixed with brass screw.	Each	173.40	593.40	
b)	Iron 9" (225 mm) long window stay fixed with brass screw.	Each	173.40	365.40	
16-64-1	Providing and fixing approved 10" (250mm) brass heavy duty quadrant stay with 1.25" (32mm) screw.	Each	173.40	833.40	
16-65	Providing and fixing approved heavy brass adjustable door holder with 3" (75mm) brass screws or with specially supplied screws.				
a)	Foot operated bronze 8.5" (216 mm) size.	Each	706.80	1673.93	
b)	Bronze, spring action type 2"x1.5" (50mmx38mm) lock plate and 2.25"x7/8" (57mmx22mm) spring.	Each	706.80	1673.93	
c)	Bronze, door holder with rubber stop 7"x1.88" (175mmx41mm) plate and rubber stops 1.5" (38mm) dia.	Each	706.80	1673.93	
16-66	Providing and fixing locks with brass or specially supplied screws including Door Closers and Floor Hinges of approved design including cutting wood to required shape and size with two operating keys.				
a)	Union lock (Local)	Each	600.00	2083.20	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Chinese lock	Each	600.00	2083.20	
c)	Yale lock	Each	600.00	1588.80	
d)	Hyundi lock	Each	600.00	3690.00	
e)	Main door lock kwikset make	Each	600.00	3072.00	
f)	Hydraulic door closer, New star make	Each	600.00	3072.00	
g)	Hydraulic door closer, HNH make	Each	600.00	3072.00	
h)	Floor Hinges	Each	1200.00	11706.00	
16-67-1	Providing and fixing approved brass drawer and cup board lock with brass screws including two operating keys.	Each	300.00	485.40	
16-68	Providing and fixing approved standard finger plate with screws.				
a)	Aluminium finger plate 6" x 2.25" (150 mm x 57 mm)	Each	225.00	913.80	
b)	Brass finger plate 6" x 2.25" (150 mm x 57 mm)	Each	225.00	670.20	
16-69	Providing and fixing approved helical brass spring hinges 6" (150mm) size with brass screws.				
a)	helical brass spring hinges 6" (150mm) Single action	Each	195.00	663.00	
b)	helical brass spring hinges 6" (150mm) Double action	Each	240.00	888.00	
16-70	Providing and fixing approved helical iron spring hinges 6" (150mm) size with iron screws.				
a)	helical iron spring hinges 6" (150mm) Single action	Each	195.00	432.60	
b)	helical iron spring hinges 6" (150mm) Double action	Each	240.00	561.60	
16-71	Providing and fixing approved piano hinges of sheet 3/4" (19mm) wide with brass screws.				
a)	Brass piano hinges of sheet 3/4" (19mm)	R.M	393.72	789.01	
b)	Iron piano hinges of sheet 3/4" (19mm)	R.M	393.72	533.10	
16-72	Providing and fixing approved parliament hinges with screws.				
a)	Brass parliament hinges 5" x 5" (125mm x 125mm) size, 12gauge	Each	180.00	825.60	
b)	Brass parliament hinges 4" x 4" (100mm x 100mm) size, 12gauge	Each	150.00	747.60	
c)	Iron parliament hinges 5" x 5" (125mm x 125mm) size, 12gauge	Each	180.00	448.80	
d)	Iron parliament hinges 4" x 4" (100 mm x 100 mm) size, 12gauge	Each	150.00	358.80	
16-73	Providing and fixing approved heavy type G.I tee hinges with screws.				
a)	GI Tee hinges 18" (450 mm) size	Each	150.00	1604.40	
b)	GI Tee hinges 12" (300 mm) size	Each	150.00	1124.40	
c)	GI Tee hinges 10" (250 mm) size	Each	150.00	1004.40	
16-74	Providing and fixing approved sliding bolts or drop bolt of sizes with screws of same metal and G.I. bolts and nuts				
a)	Brass sliding bolts				
i)	Brass sliding bolts 12" x 3/4" (300 mm x 19 mm) size	Each	225.00	1425.00	
ii)	Brass sliding bolts 10" x 5/8" (250 mm x 16 mm) size	Each	225.00	1137.00	
iii)	Brass sliding bolts 9" x 5/8" (225 mm x 16 mm) size	Each	225.00	1089.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
iv)	Brass sliding bolts 6" x 1/2" (150 mm x 13 mm) size	Each	225.00	849.00	
b)	Chromium plated brass sliding bolts				
i)	Chromium plated brass sliding bolts 12" x 3/4" (300 mm x 19 mm) size	Each	225.00	1497.00	
ii)	Chromium plated brass sliding bolts 10" x 5/8" (250 mm x 16 mm) size	Each	225.00	1281.00	
iii)	Chromium plated brass sliding bolts 9" x 5/8" (225 mm x 16 mm) size	Each	225.00	993.00	
iv)	Chromium plated brass sliding bolts 6" x 1/2" (150 mm x 13 mm) size	Each	225.00	777.00	
c)	Iron sliding bolts				
i)	Iron sliding bolts 15" x 3/4" (375 mm x 19 mm) size	Each	225.00	868.20	
ii)	Iron sliding bolts 12" x 3/4" (300 mm x 19 mm) size	Each	225.00	789.00	
iii)	Iron sliding bolts 10" x 5/8" (250 mm x 16 mm) size	Each	225.00	741.00	
iv)	Iron sliding bolts 9" x 5/8" (225 mm x 16 mm) size	Each	225.00	657.00	
v)	Iron sliding bolts 6" x 1/2" (150 mm x 13 mm) size	Each	225.00	546.60	
16-75	Providing and fixing approved tower bolts with screws of same metal				
a)	Brass tower bolts				
i)	Brass tower bolts 6" (150 mm) size	Each	150.00	619.20	
ii)	Brass tower bolts 9" (225 mm) size	Each	150.00	777.60	
iii)	Brass tower bolts 12" (300 mm) size	Each	150.00	890.40	
b)	Chromium plated brass tower bolts				
i)	Chromium plated brass tower bolts 6" (150 mm) size	Each	150.00	607.20	
ii)	Chromium plated brass tower bolts 9" (225 mm) size	Each	150.00	951.60	
iii)	Chromium plated brass tower bolts 12" (300 mm) size	Each	150.00	1700.40	
c)	Aluminium tower bolts				
i)	Aluminium tower bolts 4" (100 mm) size	Each	150.00	307.20	
ii)	Aluminium tower bolts 6" (150 mm) size	Each	150.00	363.60	
iii)	Aluminium tower bolts 8" (200 mm) size	Each	150.00	464.40	
16-76	Providing and fixing approved heavy duty safety hasp and staple with necessary screws of the same metal				
a)	Brass hasp and staple				
i)	Brass hasp and staple 5" (125 mm) size	Each	45.00	314.40	
ii)	Brass hasp and staple 4" (100 mm) size	Each	45.00	254.40	
iii)	Brass hasp and staple 3" (75 mm) size	Each	45.00	190.20	
iv)	Brass hasp and staple 2" (50 mm) size	Each	45.00	154.20	
b)	Iron hasp and staple				
i)	Iron hasp and staple 5" (125 mm) size	Each	45.00	125.40	
ii)	Iron hasp and staple 4" (100 mm) size	Each	45.00	101.40	
iii)	Iron hasp and staple 3" (75 mm) size	Each	45.00	100.20	
iv)	Iron hasp and staple 2" (50 mm) size	Each	45.00	88.20	
c)	Chromium plated				
i)	Chromium plated 5" (125 mm) size	Each	45.00	238.20	
ii)	Chromium plated 4" (100 mm) size	Each	45.00	214.20	
iii)	Chromium plated 3" (75 mm) size	Each	45.00	214.20	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
iv)	Chromium plated 2" (50 mm) size	Each	45.00	202.20	
16-77	Providing and fixing approved heavy duty safety handle with necessary screws of the same metal				
a)	Brass safety handle				
i)	Brass safety handle 7" (175 mm) size	Each	150.00	390.00	
ii)	Brass safety handle 5" (125 mm) size	Each	150.00	354.00	
iii)	Brass safety handle 4" (100 mm) size	Each	150.00	330.00	
b)	Iron Safety Handle				
i)	Iron Safety Handle 5" (125 mm) size	Each	150.00	272.40	
ii)	Iron Safety Handle 4" (100 mm) size	Each	150.00	246.00	
c)	Chromium plated Safety Handle				
i)	Chromium plated Safety Handle 7" (175 mm) size	Each	150.00	967.20	
ii)	Chromium plated Safety Handle 5" (125 mm) size	Each	150.00	771.00	
iii)	Chromium plated Safety Handle 4" (100 mm) size	Each	150.00	651.00	
16-78	Providing and fixing approved curved or circular 5/8" (16mm) dia. rod handle upto 5" (125mm) size with brass screws				
a)	Brass handle curved or circular	Each	300.00	1440.00	
b)	C.P. handle curved or circular	Each	300.00	900.00	
16-79-1	Providing and fixing approved 6" (150mm) size fancy brass heavy type door knob (handle) with plates and screws	Each	600.00	1572.00	
16-80	Providing and fixing approved section hook and eye				
a)	Brass Hook & Eye				
i)	Brass Hook & Eye 6" (150 mm) size	Each	150.00	450.00	
ii)	Brass Hook & Eye 4" (100 mm) size	Each	150.00	366.00	
b)	Galvanized iron				
i)	Galvanized iron Hook & Eye 6" (150 mm) size	Each	150.00	210.00	
ii)	Galvanized iron Hook & Eye 4" (100 mm) size	Each	150.00	186.00	
16-81	Providing and fixing floor socket of approved size and section in floors for fixing tower bolts including cutting and making good the floor.				
a)	Brass socket	Each	107.04	7739.04	
b)	Iron socket	Each	107.04	6587.04	
16-82	Providing and fixing wooden box type wardrobe 22" (550mm) deep including 3/4" (19mm) thick boxing and shelves hanger rods, hardboard 3/16" (5mm) thick back drawers, brass fitting, locking arrangement, handles, internal bolts, shoe rods including painting.				
a)	Deodar wood boxing, shelves, leaves and hardboard masonite 3/16" (5mm) thick back.	Sq.m	3357.12	74961.36	
b)	Kail wood boxing and deodar wood shelves, leaves and hard board masonite 3/16" (5mm) thick back.	Sq.m	2731.81	37653.88	
c)	Laminated board 3/4" (19mm) thick boxing, shelves and back with 3/4" thick deodar wood vaneer board	Sq.m	1875.93	14992.42	
16-83-1	Making and fixing cleats for doors and windows including hinges and screws.	Each	81.36	473.45	
16-84-1	Making and fixing cleats with brass hooks for roof ventilators	Each	128.40	814.54	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-85-1	Making and fixing 1" (25mm) thick partal wood notice board with frame.	Each	1945.41	6067.78	
16-86	Providing and fixing glass panes in wooden or steel frames of doors, windows and ventilators etc. complete in all respect.				
a)	5 mm. thick glass panes				
i)	Clear glass local 5mm	Sq.m	256.80	1407.18	
ii)	Unclear glass local 5mm	Sq.m	256.80	1336.49	
iii)	Tinted glass local 5mm	Sq.m	256.80	1336.49	
b)	6 mm. thick glass panes				
i)	Clear glass local 6mm	Sq.m	256.80	1598.45	
ii)	Unclear glass local 6mm	Sq.m	256.80	1480.64	
iii)	Tinted glass local 6mm	Sq.m	256.80	1480.64	
iv)	Clear glass imported 6mm	Sq.m	256.80	1781.40	
v)	Tinted glass imported 6mm	Sq.m	256.80	1989.30	
c)	3 mm. thick glass panes				
i)	Clear glass local 3mm	Sq.m	256.80	1002.47	
ii)	Unclear glass local 3mm	Sq.m	256.80	904.06	
16-87 a)	For first floor	% Increase	10.0%		
b)	For each additional floor above first floor	% Increase	7.5%		
16-88-1	Providing and fixing 3/4" (19mm) thick First class Kail wood tongued and grooved plain boarding, or lining on walls, jambs, skirting, cornice, chair rails and archivolt fixed on Kail wood frame backing with rawl plugs on screws, but excluding cost of backing and polishing as required.	Sq.m	1036.83	4634.37	
16-89-1	Providing and fixing of wooden moulded beading to door and window framses with iron screws, plugs; 2nd Class Teak Wood 50x12mm	R.M	255.00	349.43	
16-90-1	Providing and fixing of cup-board shutters with 25mm thick veneering particle board (MEDIUM DENSITY) with decorative UV Sheet on one side	Sq.m	1673.45	3635.67	
16-91-1	Providing and fixing of Aluminium U-beading of required size to pre-laminated / flush door shutters	Kg	1010.18	1582.94	
16-92-1	Making of Kitchen Cabinet 8'x3' make up from Veneer board (MEDIUM DENSITY) Laminated on both sides, and hanging on wall, i/c all hardwares	Sq.m	2551.15	13263.32	
16-93-1	Providing and fixing 1/2" (13mm) thick First class Shisham wood panelling in framework 3"x1.5" (75mmx38mm) of same wood on walls, jambs, skirting, cornice, chair rails and archivolt fixed on framed Shisham wood backing with rawl plugs or screws but excluding the cost of polishing as required.	Sq.m	2617.52	7699.12	
16-94-1	Providing and fixing 1/2" (13mm) thick First class Deodar wood panelling in framework 3"x1.5" (75mmx38mm) of same wood on walls, jambs, skirting, cornice, chair rails and archivolt fixed on framed Deodar wood backing with rawl plugs or screws but excluding the cost of polishing as required.	Sq.m	2617.52	13337.14	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-95	Providing and fixing wooden box type wardrobe 24" (600 mm) deep including 3/4" (19mm) thick boxing and shelves hanger rods, hardboard 3/16" (5mm) thick back drawers, brass fitting, locking arrangement, handles, internal bolts, shoe rods including painting.				
a)	UV Medium Density Fibre High Gloss Board 3/4" (19mm) thick Shutters and shelves and back with 3/4" thick laminated veneer board	Sq.m	1875.93	15081.08	
b)	PVC Board 3/4" (19mm) High Gloss laminated thick Shutters and shelves and back with 3/4" thick plain laminated board	Sq.m	1875.93	33775.54	
16-96-1	Providing and fixing 1/2" (13mm) thick MDF (Lasani or equivalant) panelling in framework 3"x1.5" (75mmx38mm) of Deodar wood on walls, jambs, skirting, cornice, chair rails and archivolt fixed on framed Deodar wood backing with rawl plugs or screws but excluding the cost of backing and polishing as required.	Sq.m	2617.52	6033.61	
16-97-1	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ±1mm), with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be Jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer- in-charge	R.M	123.26	783.26	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-98-1	30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size. 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	Sq.m	690.55	2850.55	
16-99	Providing and fixing 37 mm thick factory made PVC Door shutter, styles and rails made of PVC hollow extruded printed and laminated section having overall dimension 115 mm x 37 mm with wall thickness 2 mm (± 0.2 mm) with inbuilt beading on one side, the styles and rails mitred cut and joint at corners by inserting 2 nos PVC profile reinforcement of size 75 mm x 200 mm long with cross section size of 28 mm x 30 mm having wall thickness 2 mm (± 0.2 mm). Styles, rails and reinforcements to be fusion welded together. Only hinge side vertical style to be reinforced with PVC profile reinforcement in full length. Printed and laminated PVC lock rail of size 110 mm x 37 mm having wall thickness 2 mm (± 0.2 mm) to be welded horizontally with the vertical styles after inserting PVC profile reinforcement as in styles and rails, providing with PVC snap fit beading, panels of 100 x 20 mm printed & laminated and inserting 2 nos 6 mm dia bright steel rod horizontally with both side threaded and tightened with check nuts and washers complete, all as per manufacturer's specification and direction of engineer-in-charge.	Sq.m	690.55	3690.55	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
16-100-1	Providing and fixing factory made uPVC fixed or openable glazed windows/ ventilators comprising of uPVC multi-chambered frame and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), , uPVC extruded glazing beads of appropriate dimension, EPDM gasket, G.I fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately)	Sq.m	1471.81	28733.49	
16-101	Providing and fixing First class wood dolly Chowkat of required size for door using 2.5' x 2.5' vertical wooden plank at ends and horizontal plants at 1 ft apart for supports including 3/4'' thick Panelling				
a)	Deodar wood frame and panelling	Sq.m	1211.82	39752.80	
b)	Shisham wood frame and panelling	Sq.m	1211.82	18921.44	
c)	Kail wood frame and panelling	Sq.m	1211.82	14060.79	
d)	Kail wood frame and 1/2'' Thick MDF panelling	Sq.m	887.58	11640.50	
16-102	Providing and fixing First class Teak wood shutters fully panelled with same wood and fixed with approved brass hinges and tower bolts.				
a)	2" (50 mm) thick fully panelled shutters.First class Teak wood	Sq.m	3365.68	50190.45	
b)	1.75" (44 mm) thick fully panelled shutters.First class Teak wood	Sq.m	3365.68	47830.22	
c)	1.5" (38 mm) thick fully panelled shutters.First class Teak wood	Sq.m	3365.68	41555.57	
d)	1.25" (32 mm) thick fully panelled shutters.First class Teak wood	Sq.m	3365.68	34651.77	

SECTION – 17

PAINTING AND VARNISHING

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

2. RATES INCLUDE CHARGES FOR SCAFFOLDING AND OTHER ARRANGEMENTS AT ANY HEIGHT AND IN ANY FLOOR

3. RATES FOR PAINTING SASHES, FANLIGHTS, FULLY GLAZED OR FULLY GAUGED DOORS AND WINDOWS SHALL BE 60% OF RESPECTIVE ITEMS

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
17-1-1	Painting two or more coats as per manufacturer's instructions with wood preservative paint (solignum and/or creosote or equivalent) of any approved manufacturer in basement and ground floor	Sq.m	128.16	297.61	
17-2-1	Painting two coats with coal-tar on wood work, plastered, rendered or concrete surface in ground floor or basement.	Sq.m	170.88	214.63	
17-3-1	Painting with paint mixed at site using ingredients and pigment to produce required texture and shade in two or more coats on wood work over and including the cost of priming coat, surface preparation, rubbing down smooth, knotted, filling cracks, holes and joints in ground floor or basement.	Sq.m	385.20	667.63	
17-4-1	Painting with paint mixed at site using ingredients and pigment to produce required texture and shade in two or more coats on plastered, rendered and/or concrete surface over and including the cost of priming coat, surface preparation, dusting, rubbing down smooth, filling cracks, holes removing blisters & other blisters & other imperfections in ground floor or basement.	Sq.m	410.88	732.05	
17-5-1	Painting with paint mixed at site using ingredients and pigment to produce required texture and shade in two or more coats on steel and iron work and including the cost of priming coat, surface preparation, removing rust, scales and dust with wire brush in ground floor or basement.	Sq.m	359.52	675.82	
17-6-1	Painting with ICI/Berger or equivalent super gloss synthetic enamel paint in two or more coats as per manufacturer's instructions on wood work over and including the cost of priming coat, surface preparation, rubbing down smooth, knotted, filling cracks, holes and joints in ground floor or basement. (@ atleast 1.65 Litre per 10 Sq.m)	Sq.m	385.20	717.20	
17-7-1	Painting with ICI/Berger or equivalent super gloss synthetic enamel paint in two or more coats as per manufacturer's instructions on steel and iron work over and including the cost of priming coat, surface preparation, removing rust, scales and dust with wire brush in ground floor or basement. (@ atleast 1.25Litre per 10 Sq.m)	Sq.m	359.52	727.56	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
17-8-1	Painting with ICI/Berger or equivalent plastic emulsion paint of approved shade in two or more coats as per manufacturer's instructions on plastered rendered and/or concrete surface over and including the cost of priming coat, surface preparation, dusting, rubbing down smooth, filling cracks, holes removing blisters and other blisters and other imperfections in ground floor or basement. (@ atleast 1.65 Litre per 10 Sq.m)	Sq.m	410.88	824.31	
17-9-1	Painting with ICI/Berger or equivalent Aluminium paint in two or more coats as per manufacturer's instructions on steel and iron work over and including the cost of priming coat, surface preparation, removing rust, scales and dust with wire brush in ground floor or basement. (@ atleast 1.25 Litre per 10 Sq.m)	Sq.m	333.84	664.73	
17-10-1	Painting with black bituminous or black japan paint in two or more coats as per manufacturer's instructions on steel and iron work over and including the cost of priming coat, surface preparation, removing rust, scales and dust with wire brush in ground floor or basement. (@ atleast 1.65 Litre per 10 Sq.m)	Sq.m	333.84	495.17	
17-11-1	Painting with anti corrosive composition black bitumastic paint in two or more coats as per manufacturer's instructions on steel and iron work over and including the cost of priming coat, surface preparation, removing rust, scales and dust with wire brush in ground floor or basement. (@ atleast 1.65 Litre per 10 Sq.m)	Sq.m	333.84	588.02	
17-12-1	Painting by spray machine ICI/Berger or equivalent super gloss synthetic enamel paint in two or more coats as per manufacturer's instructions on wood work over and including the cost of priming coat, surface preparation, rubbing down smooth, knotted, filling cracks, holes and joints in ground floor or basement. (@ atleast 1.25 Litre per 10 Sq.m)	Sq.m	385.20	782.20	
17-13-1	Painting by spray machine ICI/Berger or equivalent super gloss synthetic enamel paint in two or more coats as per manufacturer's instructions on steel and iron work over and including the cost of priming coat, surface preparation, removing rust, scales and dust with wire brush in ground floor or basement. (@ atleast 1.56 Litre per 10 Sq.m)	Sq.m	359.52	777.65	
17-14-1	Painting with acid or alkali resisting paint of approved shade and make in two or more coats as per manufacturer's instructions on wood work, plastered rendered and or concrete surface over and including the cost of priming coat, surface preparation, rubbing down smooth, cleaning and rubbing in ground floor or basement. (@ atleast 2.45 Litre per 10 Sq.m)	Sq.m	385.20	566.67	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
17-15	Applying french or spirit polish of approved make on wood work in ground floor or basement				
a)	One coat (@ atleast 2.25 Litre per 10 Sq.m)	Sq.m	617.04	1267.30	
b)	Two coats (@ atleast 1.65 Litre per 10 Sq.m)	Sq.m	755.28	1545.96	
17-16-1	Applying two coats of ICI or equivalent synthetic varnish on wood work including cleaning in ground floor or basement (@ atleast 1.65 Litre per 10 Sq.m)	Sq.m	150.00	616.97	
17-17-1	Applying two coats of synthetic clear varnish of an approved manufacturer on wood work including cleaning in ground floor or basement (@ atleast 1.65 Litre per 10 Sq.m)	Sq.m	150.00	570.29	
17-18-1	Applying bee wax of an approved make on wood work including cleaning in ground floor or basement	Sq.m	368.64	663.22	
17-19	Applying ICI/Berger or equivalent aluminium paint in two or more coats as per manufacturer's instructions on pipes including specials over and including the cost of red oxide priming coat, surface preparation, removing dust, scales and dust with wire brush in ground floor or basement.				
a)	1/2" (15 mm) nominal size of pipe	R.M	20.03	39.88	
b)	3/4" (20 mm) nominal size of pipe	R.M	26.71	53.18	
c)	1" (25 mm) nominal size of pipe	R.M	33.38	66.47	
d)	1-1/4" (32 mm) nominal size of pipe	R.M	40.06	79.77	
e)	1-1/2" (40 mm) nominal size of pipe	R.M	50.08	99.71	
f)	2" (50 mm) nominal size of pipe	R.M	60.09	119.65	
g)	2-1/2" (65 mm) nominal size of pipe	R.M	76.78	152.89	
h)	3" (75 mm) nominal size of pipe	R.M	93.48	186.12	
i)	4" (100 mm) nominal size of pipe	R.M	113.51	226.01	
j)	5" (125 mm) nominal size of pipe	R.M	140.21	279.19	
k)	6" (150 mm) nominal size of pipe	R.M	170.26	339.01	
17-20	Applying red oxide paint in two/three coats as per manufacturer's instructions on steel and iron work including removing rust, scales and dust with wire brush in ground floor or basement.				
a)	Two coats (@ atleast 1.25 Litre per 10 Sq.m)	Sq.m	117.72	209.53	
b)	Three coats (@ atleast 2.0 Litre per 10 Sq.m)	Sq.m	169.08	301.47	
17-21	Lettering and figuring of any language on any surface with black Japan paint or similar of approved quality in ground floor or basement				
a)	Two coats (@ atleast 1.25 Litre per 10 Sq.m)	Each Letter	41.09	42.39	
b)	Three coats (@ atleast 2.0 Litre per 10 Sq.m)	Each Letter	61.63	63.63	
c)	Above 6" (150 mm) upto 12" (300 mm) size	Each Letter	82.18	85.15	
d)	Above 12" (300 mm) upto 18" (450 mm) size	Each Letter	123.26	128.45	
e)	Above 18" (450 mm) upto 24" (600 mm) size	Each Letter	154.08	161.96	
17-22-1	Scraping, rubbing and cleaning paints of all sorts, from walls and ceiling including removal of rubbish from the site in ground floor or basement.	Sq.m	42.72	44.86	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
17-23-1	Removing stains from wood work by scraping on applying any approved chemical including removal of rubbish from the site in ground floor or basement.	Sq.m	64.08	80.24	
17-24 a)	Scraping old paints of all sorts in ground floor or basement with blow lamp from wood, plastered, rendered and/or concrete surface including rubbing, cleaning and removal of rubbish from the site	Sq.m	77.04	107.62	
b)	Preparation of wooden surface for re-painting in ground floor or basement (after old paint has been removed) including rubbing down smooth, filling cracks, holes and joints.	Sq.m	62.04	92.50	
17-25-1	Scraping old paint of all sorts with blow lamp in ground floor or basement from steel and iron work including rubbing, cleaning and removal of rubbish from the site.	Sq.m	54.54	80.78	
17-26-1	Removing all sorts of varnish and polishes without blow lamp in ground floor or basement from wooden surface including removal of rubbish from the site.	Sq.m	25.68	41.32	
17-27	Painting old surface with solignum and or creosote paint on wood work in ground floor or basement including cleaning.				
a)	One coat	Sq.m	42.72	68.70	
b)	Two coats	Sq.m	74.76	118.14	
17-28	Painting old surface with coaltar on wood work, plastered, rendered and or concrete surface in ground floor or basement including cleaning.				
a)	One coat	Sq.m	85.44	106.75	
b)	Two coats	Sq.m	128.16	142.63	
17-29	Painting old surface in ground floor or basement with paint mixed at site using ingredient and pigment to produce required texture and shade on wood work, plastered, rendered and concrete surface including cleaning and sand papering.				
a)	One coat	Sq.m	154.08	224.66	
b)	Two coats	Sq.m	205.44	346.80	
17-30	Painting old surface in ground floor or basement with paint mixed at site using ingredient and pigment to produce required texture and shade on steel and iron work including cleaning and sand papering the surface.				
a)	One coat	Sq.m	102.72	164.64	
b)	Two coats	Sq.m	205.44	343.42	
17-31	Painting old surface in ground floor or basement with ICI/Berger or equivalent super gloss synthetic enamel paint on wood work including cleaning and sand papering the surface.				
a)	One coat	Sq.m	154.08	227.61	
b)	Two coats	Sq.m	205.44	349.50	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
17-32	Painting old surface in ground floor or basement with ICI/Berger or equivalent super gloss synthetic enamel paint on steel and iron work including cleaning and sand papering the surface.				
a)	One coat	Sq.m	102.72	167.22	
b)	Two coats	Sq.m	205.44	318.51	
17-33	Painting old surface in ground floor or basement with ICI/Berger or equivalent plastic emulsion paint as per manufacturer's instructions on plastered, rendered and concrete surface including cleaning and sand papering the surface.				
a)	One coat	Sq.m	154.08	273.66	
b)	Two coats	Sq.m	205.44	444.49	
17-34	Painting old surface in ground floor or basement with ICI/Berger or equivalent equivalent aluminium paint on steel and iron work as per manufacturer's instructions including cleaning and sand papering the surface.				
a)	One coat	Sq.m	102.72	164.64	
b)	Two coats	Sq.m	205.44	329.27	
17-35	Painting old surface in ground floor or basement with black bituminous and/or black japan paint as per manufacturer's instruction on wood and/or steel and iron work including cleaning and sand papering the surface.				
a)	One coat	Sq.m	102.72	124.00	
b)	Two coats	Sq.m	154.08	290.77	
17-36	Painting old surface in ground floor or basement with acid or alkali resisting paint of approved make and shade including cleaning and sand papering.				
a)	One coat	Sq.m	154.08	193.60	
b)	Two coats	Sq.m	205.44	281.61	
17-37	Varnishing in ground floor or basement with varnish paint of approved make on old surface of wood work including cleaning the surface.				
a)	One coat	Sq.m	154.08	185.05	
b)	Two coats	Sq.m	205.44	260.82	
17-38	Spirit or french polishing of approved make on old surface of wood work including sand papering and cleaning in ground floor or basement.				
a)	One coat	Sq.m	233.76	375.01	
b)	Two coats	Sq.m	396.72	638.93	
17-39	Applying copal varnish of an approved make on old surface of wood work including sand papering and cleaning in ground floor or basement.				
a)	One coat	Sq.m	154.08	329.95	
b)	Two coats	Sq.m	205.44	567.58	
17-40	Applying synthetic clear varnish of an approved make on old surface of wood work including sand papering and cleaning in ground floor or basement.				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
a)	One coat	Sq.m	154.08	312.97	
b)	Two coats	Sq.m	205.44	532.22	
17-41	Applying bee wax polishing on old surface of wood work including sand papering and cleaning in ground floor or basement.	Sq.m	276.48	502.13	
17-42	Applying ICI/Berger or equivalent aluminium paint in two or more coats as per manufacturer's instructions on old surface of pipes including specials sand papering and cleaning in ground floor or basement.				
a)	1/2" (15 mm) nominal size of pipe				
i)	One coat	R.M	6.16	9.88	
ii)	Two coats	R.M	12.33	19.76	
b)	3/4" (20 mm) nominal size of pipe				
i)	One coat	R.M	8.22	13.17	
ii)	Two coats	R.M	16.44	26.34	
c)	1" (25 mm) nominal size of pipe				
i)	One coat	R.M	10.27	16.46	
ii)	Two coats	R.M	20.54	32.93	
d)	1-1/4" (32 mm) nominal size of pipe				
i)	One coat	R.M	12.33	19.76	
ii)	Two coats	R.M	24.65	39.51	
e)	1-1/2" (40 mm) nominal size of pipe				
i)	One coat	R.M	15.41	24.70	
ii)	Two coats	R.M	30.82	49.39	
f)	2" (50 mm) nominal size of pipe				
i)	One coat	R.M	18.49	29.63	
ii)	Two coats	R.M	36.98	59.27	
g)	2-1/2" (65 mm) nominal size of pipe				
i)	One coat	R.M	23.63	37.87	
ii)	Two coats	R.M	47.25	75.73	
h)	3" (75 mm) nominal size of pipe				
i)	One coat	R.M	28.76	46.10	
ii)	Two coats	R.M	57.52	92.20	
i)	4" (100 mm) nominal size of pipe				
i)	One coat	R.M	34.92	55.98	
ii)	Two coats	R.M	69.85	111.95	
j)	5" (125 mm) nominal size of pipe				
i)	One coat	R.M	43.14	69.15	
ii)	Two coats	R.M	86.28	138.29	
k)	6" (150 mm) nominal size of pipe				
i)	One coat	R.M	52.39	83.96	
ii)	Two coats	R.M	104.77	167.93	
17-43-1	Applying in ground floor or basement one coat with zinc chromate primer on old surface of approved make including sand papering and cleaning the surface.	Sq.m	102.72	261.44	
17-44-1	Applying in ground floor or basement one coat with synthetic red or white lead primer on old surface of approved make including sand papering and cleaning the surface.	Sq.m	102.72	244.22	
17-45-1	Applying in ground floor or basement one coat with synthetic red oxide primer on old surface of approved make including sand papering and cleaning the surface.	Sq.m	102.72	310.64	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
17-46-1	Removing in ground floor or basement old paint from brick works including cleaning & removing the rubbish from the site.	Sq.m	281.95		
17-47	Extra for respective payable item of ground floor				
a)	For first floor	%	10.0%		
b)	For each additional floor above first floor	%	7.5%		
17-48-1	Painting traffic lane 5"(125 mm) wide, with road marking enamel	Sq.m	4.27	10.51	
17-49-1	Painting traffic lane 5"(125 mm) wide, with road marking enamel wide with reflective clorinated rubber (CR) paint including glass beads complete in all respects	R.M	26.09	70.75	
17-50-1	P/L road marking with T.P (Thermoplastic) reflective paint 5'' wide. Complete in all respect.	R.M	26.09	40.89	
17-51-1	Scraping, rubbing and cleaning of oil bound distemper from ceiling and walls including removal of rubbish in all floor items.	Sq.m	64.08	111.66	
17-52-1	Scraping, rubbing and cleaning emulsion finish distemper from walls and ceiling including removal of rubbish in all floor items.	Sq.m	106.80	135.96	
17-53-1	Brushing and cleaning with solution of caustic soda the surface of stone masonry, brick masonry and concrete including removal of rubbish in all floor items.	Sq.m	64.08	93.24	
17-54	White washing on old surface of walls & ceiling including dusting and cleaning in basement and ground floor				
a)	One coat	Sq.m	42.72	68.30	
b)	Two coats	Sq.m	53.40	91.77	
c)	Three coats	Sq.m	64.08	115.24	
17-55	Colour washing on old surface of walls and ceiling including dusting and cleaning in basement and ground floor				
a)	One coat	Sq.m	44.86	74.27	
b)	Two coats	Sq.m	55.54	99.66	
c)	Three coats	Sq.m	66.22	125.05	
17-56	Chalk washing on old surface of walls and ceiling including dusting and cleaning in basement and ground floor				
a)	One coat	Sq.m	42.72	61.66	
b)	Two coats	Sq.m	64.08	76.58	
c)	Three coats	Sq.m	85.44	101.15	
17-57	Cement washing on old surface of walls and ceiling including dusting and cleaning in basement and ground floor				
a)	One coat	Sq.m	42.72	50.29	
b)	Two coats	Sq.m	64.08	77.95	
c)	Three coats	Sq.m	85.44	99.31	
17-58	Painting with Premier Quality Distemper on old surface of walls and ceiling including dusting and cleaning in basement and ground floor.				
a)	One coat @ atleast 2 Kgs per 10 Sq.m.	Sq.m	128.40	196.05	
b)	Two coats @ atleast 3 Kgs per 10 Sq.m.	Sq.m	154.08	255.56	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
17-59	Oil free distempering of approved make and shade on old surface of walls and ceiling including dusting, sand papering and cleaning in basement and ground floor.				
a)	One coat (@ atleast 0.75 Kg per 10 Sq.m)	Sq.m	64.20	89.57	
b)	Two coats (@ atleast 1.00 Kg per 10 Sq.m)	Sq.m	102.72	136.55	
c)	Three coats (@ atleast 1.50 Kg per 10 Sq.m)	Sq.m	128.40	179.14	
17-60	Distempering with Berger/ ICI or equivalent synthetic vinyl emulsion paint of approved shade on old surface of walls and ceiling including dusting, sand papering and cleaning in basement and ground floor.				
a)	One coat (@ atleast 1.25 Kg per 10 Sq.m)	Sq.m	92.04	134.32	
b)	Two coats (@ atleast 1.50 Litre per 10 Sq.m)	Sq.m	102.72	153.46	
c)	Three coats (@ atleast 1.75 Litre per 10 Sq.m)	Sq.m	128.40	187.60	
17-61	Applying weather resistant paint coating such as ICI/ Berger or equivalent paint of approved shade on old surface of walls and ceiling including dusting, sand papering and cleaning, scaffolding and removal of debris.				
a)	One coat (@ atleast 1.75 Litre per 10 Sq.m)	Sq.m	248.16	367.23	
b)	Two coats(@ atleast 2.25 Litre per 10 Sq.m)	Sq.m	278.16	431.24	
c)	Three coats (@ atleast 3.00 Litre per 10 Sq.m)	Sq.m	350.88	527.37	
17-62-1	White washing three coats including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor.	Sq.m	55.54	393.13	
17-63-1	Colour washing two coats over and including the cost of one priming coat of lie wash including dusting, filling the holes, cracks and removing inequalities, if any, at any height in any floor	Sq.m	61.09	445.16	
17-64-1	Chalk washing three coats at any height in any floor.	Sq.m	56.60	120.89	
17-65-1	Cement washing two coats at any height in any floor.	Sq.m	34.18	47.94	
17-66-1	Oil free distempering of approved make and shade in two or more coats over and including the cost of priming coat including preparation of surface viz. dusting, sand papering or rubbing with pumice stone, filling cracks or holes, if any, removing blisters or other imperfections at any height and any floor. (@ atleast 1.25 kg per 10 Sq.m of distemper per coat)	Sq.m	190.44	291.60	
17-67-1	Distempering with Berger, ICI or equivalent synthetic polyvinyl emulsion finish of approved shade in two or more coats over and including the cost of priming coat including preparation of surface viz. dusting, sand papering or rubbing with pumice stone, filling cracks or holes, if any, removing blisters or other imperfections at any height and any floor. (@ atleast 2.20 Litre per 10 Sq.m)	Sq.m	228.96	405.64	
17-68-1	Snow ceming of approved make and shade in two coats well scrubbed into the surface including finishing smooth at any height in ground floor and basement (@ atleast 3.25 Kgs per 10 Sq.m.	Sq.m	216.12	306.49	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
17-69-1	Applying weather resistant paint coating such as ICI weather shield,Berger weather coat or equivalent to interior or exterior walls or ceiling including supplying all labour, materials, scaffoldings and removal of debris etc. @ atleast 3.50 litre per 10 Sq.m.	Sq.m	308.16	533.31	
17-70-1	Extra for making band of required size in white wash, colour wash and distemper at any height in ground floor and basement	Sq.m	188.16	376.32	
17-71-1	Applying architectural coating such as Rockwall, Durock, Graphaito or equivalent to interior or exterior walls including supplying all labour, materials, scaffoldings and removal of debris etc.	Sq.m	308.16	744.75	
17-72-1	Extra for Paint of height above 12 ft but upto 24 ft on Ground Floor only	%	15.00%		

SECTION – 18

LINING OF CANALS

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

2. RATES ALSO INCLUDE CURING FOR SPECIFIED PERIOD WHEREVER NECESSARY

3. NOMINAL DIMENSIONS OF TILE OR BRICK SHALL BE TAKEN FOR THE PURPOSE OF MEASUREMENT AND PAYMENT

4. JOINTS TREATMENT WILL BE PAID FOR UNDER RESPECTIVE ITEMS IN SECTION-5 “CONCRETE”

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
18-1	Forming, dressing and preparing sub-grade to provide smooth and finished surface for lining in bed and on side slopes on already compacted embankment of canals.				
a)	In bed	Sq.m	186.90	196.25	
b)	On slopes	Sq.m	256.32	269.14	
18-2-1	Trench excavation for profile walls of lining in bed and on slopes below sub-grade level and disposal of excavated material upto 50 ft (15 m.)	Cu.m	64.08		
18-3-1	Providing and laying 2" (50 mm) thick stabilizing layer of cement sand mortar(1:30) on slopes including curing. Excavation below sub-grade line will be paid under item 18-2-1.	Sq.m	376.32	576.99	
18-4-1	Providing and laying 1/2 " (13 mm) thick cement plaster 1:6 in bed and on slopes of canals including trowel finishing and curing.				
a)	In bed	Sq.m	240.54	392.19	
b)	On slopes	Sq.m	297.19	448.84	
18-5	Providing and laying 1" (25 mm) thick cement plaster 1:6 in bed and on slopes of canals including trowel finishing and curing.				
a)	In bed	Sq.m	292.92	596.22	
b)	On slopes	Sq.m	368.82	672.12	
18-6	Providing and laying 1.25" (32 mm) thick cement plaster 1:6 in bed and on slopes of canals including trowel finishing and curing.				
a)	In bed	Sq.m	368.82	747.95	
b)	On slopes	Sq.m	444.72	823.85	
18-7	Providing and laying 1.5" (38 mm) thick cement plaster 1:6 in bed and on slopes of canals including trowel finishing and curing.				
a)	In bed	Sq.m	444.72	888.84	
b)	On slopes	Sq.m	474.72	918.84	
18-8	Providing and laying 1.75" (45 mm) thick cement plaster 1:6 in bed and on slopes of canals including trowel finishing and curing.				
a)	In bed	Sq.m	474.72	1005.50	
b)	On slopes	Sq.m	532.44	1063.22	
18-9	Providing and laying 1/2 " (13 mm) thick cement plaster 1:3 in bed and on slopes of canals including trowel finishing and curing.				
a)	In bed	Sq.m	240.54	516.81	
b)	On slopes	Sq.m	297.19	573.46	
18-10-1	Providing and spraying asphalt/bitumen membrane 1.65 kg/sq.m. having a thickness of not less than (1/16") 1.6mm on mortar base and/or on lining including heating and cost of hire charges of plant.	Sq.m	147.24	687.38	
18-11-1	Providing and spraying asphalt/bitumen membrane 3.30 kg/sq.m. having a thickness of not less than (1/8") 3.2mm on mortar base and/or on lining including heating and cost of hire charges of plant.	Sq.m	208.50	1234.34	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
18-12	Providing and laying first class burnt brick tiles 12" x 6" x 2" (305mm x152mm x 51mm) in lining between profile walls in 1 : 6 cement sand mortar over and including the cost of 3/8" (9.5mm) bedding and vertical joints and including scaffolding, formwork, its removal and curing. The stabilizing layer and cement plaster as laid on site as per design requirements, will be paid separately.				
a)	In bed	Cu.m	5667.60	22094.14	
b)	On slopes	Cu.m	6533.40	22959.94	
18-13	Providing and laying first class burnt brick tiles 12" x 6" x 2" (305mm x152mm x 51mm) in lining between profile walls in 1:3 cement sand mortar over and including the cost of 3/8" (9.5mm) bedding and vertical joints and including scaffolding, formwork, its removal and curing. The stabilizing layer and cement plaster as laid on site as per design requirements, will be paid separately.				
a)	In bed	Cu.m	5667.60	20951.43	
b)	On slopes	Cu.m	6533.40	21531.55	
18-14	Providing and laying first class burnt brick 9" x 4.38" x 2.69" (230mm x110mm x 68mm) in lining between profile walls in 1:6 cement sand mortar over and including the cost of 3/8" (9.5mm) bedding and vertical joints and including scaffolding, formwork, its removal and curing. The stabilizing layer and cement plaster as laid on the site as per design requirements, will be paid separately.				
a)	In bed	Cu.m	5667.60	18637.41	
b)	On slopes	Cu.m	6533.40	19379.69	
18-15	Providing and laying first class burnt brick 9" x 4.38" x 2.69" (230mm x110mm x 68mm) in lining between profile walls in 1:3 cement sand mortar over and including the cost of 3/8" (9.5mm) bedding and vertical joints and including scaffolding, formwork, its removal and curing. The stabilizing layer and cement plaster as laid on site as per design requirements, will be paid separately.				
a)	In bed	Cu.m	5667.60	21188.41	
b)	On slopes	Cu.m	6533.40	21764.10	
18-16	Providing and laying in situ cement concrete using crushed aggregate 3/4" (19mm) thick and down gauge in canal lining including scaffolding, formwork, its removal and curing.				
a)	In bed				
i)	Cement concrete lining 1 : 2 : 4	Cu.m	4819.80	21641.78	
ii)	Cement concrete lining 1 : 3 : 6	Cu.m	4819.80	18925.26	
iii)	Cement concrete lining 1 : 4 : 8	Cu.m	4819.80	16166.44	
b)	On slopes				
i)	Cement concrete lining 1 : 2 : 4	Cu.m	5632.20	22576.04	
ii)	Cement concrete lining 1 : 3 : 6	Cu.m	5632.20	19859.52	
iii)	Cement concrete lining 1 : 4 : 8	Cu.m	5632.20	17100.70	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	

SECTION – 19

PROTECTION AND DIVERSION WORKS

1. STONE PITCHING ON SLOPE / LEVEL BOULDER FILLING IN WIRE CRATES IN RETAINING WALLS, WING WALLS, APRONS TOE WALLS, PROTECTION WALL (IN STEPS AND SLOPE) AND OTHER GABION / DRY HAND PACKED STRUCTURES HAVING PROPER DESIGN SECTION WILL BE TREATED AS FINISH WORK AND NO DEDUCTION FOR VOIDS WILL BE MADE FROM MEASUREMENTS

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
19-1 a)	Cutting pilchi, frash or sarkanda including carriage within one km.	Cu.m	534.00		
b)	Extra for every additional 1/2 km. or part thereof.	Cu.m	106.80		
19-2-1	Weaving matresses.	Sq.m	106.80		
19-3-1	Supplying and filling old jute bags 1.25 Cu.ft. (0.035Cu.m.) capacity with sand or earth including sewing and stacking on dry surface.	Each	53.40	150.00	
19-4-1	Supplying and filling old jute bags 1.25 Cu.ft. (0.035Cu.m.) capacity with sand or earth including sewing and laying in position under water.	Each	106.80	203.40	
19-5-1	Supplying & filling new jute bags 4 to 5 Cu.ft. (0.11 to 0.14Cu.m.) capacity with sand or earth including sewing and stacking on dry surface	Each	213.60	324.00	
19-6-1	Supplying & filling new jute bags 4 to 5 Cu.ft. (0.11 to 0.14Cu.m.) capacity with sand or earth including sewing and laying in position under water.	Each	320.40	430.80	
19-7	Carriage of jute bags 1.25 Cu.ft.(0.035 cu.m.) capacity filled with sand or earth.				
a)	First 100 ft.(30 m.) (1st chain)	%Nos.	534.00		
b)	Second 100 ft.(30 m.) or part thereof to 400 ft.(120 m.) per 30m. (2nd chain to 4th chain)	%Nos. per 30m.	213.60		
c)	Fifth 100 ft. (30 m.) or part thereof (5th chain)	%Nos. per 30m.	106.80		
19-8	Carriage of jute bags 4 to 5 Cu.ft. (0.11 to 0.14 cu.m.) capacity filled with sand or earth.				
a)	First 100 ft. (30 m.) (1st chain)	%Nos.	2136.00		
b)	Second 100 ft.(30 m.) or part thereof to 400 ft.(120 m.) per 30 m.(2nd chain to 4th chain)	%Nos. per 30m	854.40		
c)	Fifth 100 ft.(30 m.) or part thereof (5th chain)	%Nos. per 30m	427.20		
19-9	Rolling matresses to river edge and floating after unrolling.				
a)	Area of matresses upto 2000 Sq.ft.(186 Sq.m.)	Sq.m	1495.20		
b)	Area of matresses above 2000 upto 2500 Sq.ft.(186 to 232 Sq.m.)	Sq.m	2136.00		
c)	Area of matresses above 2500 Sq.ft.(232 Sq.m.)	Sq.m	2563.20		
19-10-1	Sewing empty cement bags in sheets.	%Nos.	2136.00	3204.00	
19-11-1	Making compact pilchi, frash or sarkanda round bundles of specified size for the work	Cu.m	1068.00	1335.00	
19-12-1	Launching round bundles as in item No.19-11-1 in canal or in river and placing in position.	Cu.m	747.60		
19-13	Collecting and stacking at site of work within 500 ft. (150 m or Five chains)				
a)	Boulders and/or stones 9" (230 mm) and above.	Cu.m	2136.00		
b)	Oversize shingle 3" to 9" (75 mm to 230 mm).	Cu.m	1388.40		
c)	Mixed graded shingle	Cu.m	1708.80		
19-14-1	Supplying Munj or Patha Trungers 6" (150 mm) mesh, capacity 3 Cu.ft (0.085 Cu.m) or one Sq.m. in size.	Each	213.60	369.60	
19-15-1	Providing and laying Crush Aggregate on top of bund, including handling of material within 300 ft. (90m).	Cu.m	640.80	2647.20	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
19-16	Providing and weaving G.I. wire netting for wire crates including siding and partition to make crates.				
a)	6" (150 mm) mesh				
i)	15 SWG (1.69 mm) wire	Sq.m	469.92	703.92	
ii)	10 SWG (2.54 mm) wire	Sq.m	489.50	1027.70	
iii)	8 SWG (3.18 mm) wire	Sq.m	489.50	1378.70	
b)	4" (100 mm) mesh				
i)	15 SWG (1.69 mm) wire	Sq.m	626.56	1000.96	
ii)	10 SWG (2.54 mm) wire	Sq.m	665.72	1461.32	
iii)	8 SWG (3.18 mm) wire	Sq.m	665.72	1929.32	
19-17	Supplying and dumping without boat within a lead of 300 ft (90m or three chains). (No additional cost to be provided for voids)				
a)	Stone or boulders	Cu.m	1174.80	3594.36	
b)	Shingle or spawl	Cu.m	1174.80	3181.20	
c)	Brick bats	Cu.m	1174.80	3748.80	
19-18	Supplying and dumping by boat within a lead of 300 ft (90m or three chains). (No additional cost to be provided for voids)				
a)	Stone or boulders	Cu.m	2130.00	4549.56	
b)	Shingle or spawl	Cu.m	2130.00	4136.40	
c)	Brick bats	Cu.m	1489.20	4063.20	
19-19	Providing and filling brick bats into crates, the cost of crates will be paid for separately	Cu.m	1602.00	3942.00	
19-20	Supplying, filling and packing brick into crates by hand, the cost of crates will be paid for separately	Cu.m	1922.40	13672.80	
19-21	Supplying and filling in wire crates including sewing the crates. The cost of crates shall be paid for separately.Semi -dressed with hand packing.				
a)	Stone or boulders	Cu.m	2029.20	4448.76	
b)	Shingle or spawl	Cu.m	2029.20	4035.60	
19-22	Extra for anchoring boats for dumping by boats and or tipping crates.	Cu.m	267.00		
19-23	Extra for tipping crates over and above item 19-22.	Cu.m	1068.00		
19-24	Pilchi revetment including carriage within one kilometre.	Sq.m	170.88	318.84	
19-25	Surface protection with pilchi matresses including carriage upto one kilometre.	Sq.m	427.20	441.60	
19-26	Supplying and laying pilchi, sarkanda or frash pitching on slopes within one Km. Including supplying and driving of pegs 1.5 ft (0.5m.) long sharpened at one end and tying with wire or munj/patha band. Cost of placing earth between rolls shall be paid for separately as earthwork.	Sq.m	298.95	550.95	
19-27	Constructing groynes upto 5 ft.(1.5m) height, with single row of wooden vertical stakes 7" to 12" (175mm to 300mm.) dia., 12" (0.3m) apart, average lead one Km. The measurement shall be made for the area of elevation on one face only.	Sq.m	107.40	141.90	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
19-28	Constructing groynes upto 10 ft. (3m) height, with double row of wooden vertical stakes 7" to 12" (175mm to 300mm) dia., 12" (0.3m) apart, average lead one Km. The measurement shall be made for the area of elevation on one face only.	Sq.m	193.20	216.66	
19-29	Providing and laying stone pitching and/or filling dry hand packed as filling behind retaining walls and/or in pitching or aprons.	Cu.m	1288.80	3488.40	
19-30 a)	Providing and laying stone pitching with hammer dressed stones on surface laid in courses including lift of 1.5 m and lead upto 30m.	Cu.m	3208.80	5656.80	
b)	Extra for every 5 ft of additional lift	Cu.m	427.20		
19-31	Providing and laying stone pitching for top layer only.				
a)	On slope	Cu.m	2908.80	5356.80	
b)	On level	Cu.m	2268.00	4716.00	
19-32	Providing and filling stone spawl. (No additional cost to be provided for voids)				
19-32 a)	On slope	Cu.m	1281.60	3873.60	
b)	On level	Cu.m	854.40	3302.40	
19-33	Providing and laying stone pitching by hand packing with surface levelled off to the correct section and voids filled in 1:8 cement sand mortar in floors of bridges, along banks and/or in aprons. (No additional cost to be provided for voids)				
a)	Top layer on slope	Cu.m	4790.40	10054.31	
b)	Top layer on level	Cu.m	4363.20	9605.75	
c)	Stone pitching and/or filling on slope or on level surface other than top layer.	Cu.m	2224.80	7009.93	
19-34	Grouting stone pitching.				
a)	Cement sand mortar 1 : 3	Sq.m	502.44	1760.49	
b)	Cement sand mortar 1 : 8	Sq.m	502.44	1098.28	
19-35-1	Sand grouting in stone apron with high pressure hose.	Sq.m	188.16	286.59	
19-36 a)	Grouting or filling stone pitching with shingle/bajri.	Sq.m	188.16	254.65	
b)	Grouting or filling stone pitching with P.C.C 1:3:6	Sq.m	188.16	235.62	
19-37-1	Removing stone and repitching (hand packed) on slopes or level including making good any damage to slopes and or level portion.	Cu.m	1977.00	2000.72	
19-38-1	Grouting jharies between blocks with Crush Aggregate.		759.00	1302.60	
19-39	Breaking stone into spawls and stacking.				
a)	3" (75 mm) and down gauge	Cu.m	1708.80		
b)	2.5" (64 mm) and down gauge	Cu.m	1922.40		
c)	2" (50 mm) and down gauge	Cu.m	2136.00		
d)	1.5" (37 mm) and down gauge	Cu.m	2349.60		
e)	1" (25 mm) and down gauge	Cu.m	2563.20		
f)	3/4" (19 mm) and down gauge	Cu.m	2723.40		
19-40	Fixing floating spurs, with material taken from canal plantation within one Km.				
a)	Upto 1.5 ft. (0.5 m.) full supply depth	Each	51.26		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Above 1.5 to 3 ft. (0.5 to 1.0 m.) full supply depth	Each	76.90		
c)	Above 3 to 4.5 ft. (1.0 to 1.5 m.) full supply depth	Each	102.53		
d)	Above 4.5 ft. (1.5 m.) full supply depth	Each	153.79		
19-41	Cutting unsharpened pegs from canal plantation and stacking within one km.				
a)	Unsharpened pegs 3 ft.(1m.) long & 3" to 6" (75 to 150mm) dia.	%Nos.	2054.40	2568.00	
b)	Unsharpened pegs above 3 ft.to 4 ft.(1m to 1.25m.) long & 3" to 6" (75mm to 150mm) dia.	%Nos.	2311.20	2889.00	
c)	Unsharpened pegs 4 ft.to 4.5 ft.(1.25m to 1.5m.) long & 3" to 6" (75mm to 150 mm) dia.	%Nos.	2824.80	3531.00	
d)	Unsharpened pegs above 4.5 ft.to 6.5 ft.(1.5m to 2m.) long & 3" to 6" (75mm to 150mm) dia.	%Nos.	3338.40	4173.00	
e)	Unsharpened pegs above 6.5 ft.to 8 ft.(2m to 2.5m) long & 4" to 8" (100mm to 200mm) dia.	%Nos.	6676.80	8346.00	
19-42	Supplying unsharpened pegs and stacking along the canal bank.				
a)	Unsharpened pegs 3 ft.(1m.) long & 3" to 6" (75 to 150 mm) dia.	%Nos.		3081.60	
b)	Unsharpened pegs above 3 ft.to 4 ft.(1m to 1.25m.) long & 3" to 6" (75mm to 150mm) dia.	%Nos.		3466.80	
c)	Unsharpened pegs above 4 ft.to 4.5 ft.(1.25m to 1.5m.) long & 3" to 6" (75mm to 150mm) dia.	%Nos.		4237.20	
d)	Unsharpened pegs above 4.5 ft.to 6.5 ft.(1.5m to 2m.) long & 3" to 6" (75mm to 150mm) dia.	%Nos.		5007.60	
e)	Unsharpened pegs above 6.5 ft.to 8 ft.(2m to 2.5m) long & 4" to 8" (100mm to 200mm) dia.	%Nos.		10015.20	
19-43	Sharpening one end of pegs				
a)	Pegs 3 ft.(1m.) long & 3" to 6" (75 to 150 mm) dia.	%Nos.	1284.00		
b)	Pegs above 3 ft.to 4 ft.(1m to 1.25m.) long & 3" to 6" (75mm to 150mm) dia.	%Nos.	1350.77		
c)	Pegs above 4 ft.to 4.5 ft.(1.25m to 1.5m.) long & 3" to 6" (75mm to 150mm) dia.	%Nos.	1417.54		
d)	Pegs above 4.5 ft.to 6.5 ft.(1.5m to 2m.) long & 3" to 6" (75mm to 150mm) dia.	%Nos.	1561.34		
e)	Pegs above 6.5 ft.to 8 ft.(2m to 2.5m.) long & 4" to 8" (100mm to 200mm) dia.	%Nos.	3616.60		
19-44	Driving pegs below the available bed and/or ground level.				
a)	Pegs 3 ft.(1m.) long & 3" to 6" (75 to 150 mm) dia to be driven 1 ft. (0.3m)	%Nos.	1783.56		
b)	Pegs above 3 ft.to 4 ft.(1m to 1.25m.) long & 3" to 6" (75mm to 150mm) dia to be driven 1.25 ft. (0.4 m)	%Nos.	2050.56		
c)	Pegs 4 ft.to 4.5 ft.(1.25m to 1.5m.) long & 3" to 6" (75mm to 150 mm) dia to be driven 1.5 ft. (0.45 m)	%Nos.	2358.14		
d)	Pegs above 4.5 ft.to 6.5 ft.(1.5m to 2m.) long & 3" to 6" (75mm to 150mm) dia to be driven 1.75 ft. (0.55 m)	%Nos.	2712.72		
e)	Pegs above 6.5 ft.to 8 ft.(2m to 2.5m.) long & 4" to 8" (100mm to 200mm) dia to be driven 2 ft. (0.6 m)	%Nos.	1783.56		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
19-45	Tying one row of pegs of any size with mung, patha or coir ban including tying round each peg.	Per 30m. of one row	3118.56	3235.56	
19-46	Cutting brush wood from canal plantation lead within one km and wattling between stakes and inter twining (Av. thickness = 1ft. (0.3m) of wattled brushwood)				
a)	For 3 ft. (1 m.) long pegs.	Per 30m. of one row	4912.80		
b)	For 3 ft. to 4 ft. (1 m. to 1.25 m) long pegs.	Per 30m. of one row	5126.40		
c)	For 4 ft. to 5 ft. (1.25 m. to 1.5 m) long pegs.	Per 30m. of one row	6621.60		
d)	For 5 ft. to 6.5 ft. (1.5 m. to 2 m) long pegs.	Per 30m. of one row	8544.00		
e)	For 6.5 ft. to 8 ft. (2 m. to 2.5 m) long pegs.	Per 30m. of one row	11534.40		
19-47	Supplying brush wood and stacking along the canal and wattling between stakes and inter twining (Av. thickness = 1ft. (0.3m) of wattled brushwood)				
a)	For 3 ft. (1 m.) long pegs.	Per 30m. of one row		5502.34	
b)	For 3 ft. to 4 ft. (1 m. to 1.25 m) long pegs.	Per 30m. of one row		5741.57	
c)	For 4 ft. to 5 ft. (1.25 m. to 1.5 m) long pegs.	Per 30m. of one row		7416.19	
d)	For 5 ft. to 6.5 ft. (1.5 m. to 2 m) long pegs.	Per 30m. of one row		9569.28	
e)	For 6.5 ft. to 8 ft. (2 m. to 2.5 m) long pegs.	Per 30m. of one row		12918.53	
19-48	Supplying bamboos.				
a)	10 ft. (3 m.) long and 2" (50 mm) dia.	Each		352.80	
b)	11.5 ft. (3.5 m.) long and 3" (75 mm) dia.	Each		550.20	
c)	14 ft. (4.25 m.) long and 3" (75 mm) dia.	Each		668.10	
d)	16.5 ft. (5 m.) long and 3.5" to 4" (87.5 mm to 100 mm) dia.	Each		888.00	
e)	20 ft. (6 m.) long and 3.5" to 4" (87.5 mm to 100 mm) dia.	Each		1065.60	
19-49	Sharpening one end of bamboo pegs.				
a)	10 ft. (3 m.) long and 2" (50 mm) dia.	%Nos.	1797.60		
b)	11.5 ft. (3.5 m.) long and 3" (75 mm) dia.	%Nos.	1977.36		
c)	14 ft. (4.25 m.) long and 3" (75 mm) dia.	%Nos.	2175.10		
d)	16.5 ft. (5 m.) long and 3.5" to 4" (87.5 mm to 100 mm) dia.	%Nos.	2392.61		
e)	20 ft. (6 m.) long and 3.5" to 4" (87.5 mm to 100 mm) dia.	%Nos.	2631.87		
19-50	Driving bamboos below available bed and/or ground level.				
a)	10 ft. (3 m.) long and 2" (50 mm) dia. to be driven 2.5 ft. (0.75m)	%Nos.	2847.29		
b)	11.5 ft.(3.5 m.) long and 3" (75 mm) dia to be driven 2.75 ft (0.8m)	%Nos.	3274.38		
c)	14 ft. (4.25 m.) long and 3" (75 mm) dia to be driven 3.5 ft (1.05m)	%Nos.	3765.54		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
d)	16.5 ft.(5m) long and 3.5" to 4" (87.5mm to 100mm) dia to be driven 4 ft (1.05m)	%Nos.	4142.09		
e)	20 ft. (6 m) long and 3.5" to 4" (87.5mm to 100mm) dia to be driven 4 ft (1.25m)	%Nos.	4556.30		
19-51-1	Tying two rows of bamboos 50mm dia with munj, patha or coir ban including tying around each peg.	Per 30m. of one row	213.60	385.20	
19-52-1	Tying two rows of bamboos 3" to 4" (75mm to 100mm) dia with G.I SWG No.10 (2.54mm) wire including tying around the bamboos and third tie around the top end only	Per 30m. of one row	213.60	4893.60	
19-53	Cutting brush wood from canal plantation lead within one km and wattling between stakes and inter twining (Av. thickness = 1ft (0.3m) of wattled brush wood).				
a)	For bamboos above 8 ft. to 10 ft.(2.5 to 3 m.) long	Per 30m. of one row	14097.60		
b)	For bamboos above 10 ft. to 11.5 ft.(3 to 3.5 m.) long	Per 30m. of one row	16874.40		
c)	For bamboos above 11.5 ft. to 13 ft.(3.5 to 4 m.) long	Per 30m. of one row	18903.60		
d)	For bamboos above 13 ft. to 15 ft.(4 to 4.5 m.) long	Per 30m. of one row	22428.00		
e)	For bamboos above 15 ft. to 16.5 ft.(4.5 to 5 m.) long	Per 30m. of one row	24564.00		
f)	For bamboos above 16.5 ft. to 20 ft.(5 to 6 m.) long	Per 30m. of one row	29690.40		
19-54	Supply brush wood and stacking along the canal bank and wattling between stakes and inter twining (Av. thickness = 1ft. (0.3 m) of wattled brush wood				
a)	For bamboos above 8 ft. to 10 ft.(2.5 to 3 m.) long	Per 30m. of one row	14097.60	15789.31	
b)	For bamboos above 10 ft. to 11.5 ft.(3 to 3.5 m.) long	Per 30m. of one row	16874.40	18899.33	
c)	For bamboos above 11.5 ft. to 13 ft.(3.5 to 4m.) long	Per 30m. of one row	18903.60	21172.03	
d)	For bamboos above 13 ft. to 15 ft.(4 to 4.5m.) long	Per 30m. of one row	22428.00	25119.36	
e)	For bamboos above 15 ft. to 16.5 ft.(4.5 to 5 m.) long	Per 30m. of one row	24564.00	27511.68	
f)	For bamboos above 16.5 ft. to 20 ft.(5 to 6 m.) long	Per 30m. of one row	29690.40	33253.25	
19-55-1	Cutting and stacking brush wood from canal plantation within one km.	Cu.m	427.20		
19-56-1	Supplying brush wood and stacking along canal bank.	Cu.m	427.20	478.46	
19-57-1	Filling brush wood only, thoroughly packed.	Cu.m	213.60		
19-58-1	Covering road 10 to 12 ft. (3 to 3.5m.) wide with 3" (75mm) sarkanda or jungle within 100 ft. (30 m)	Per	1984.34		
19-59-1	Gachi pitching 1 ft (0.3m) thick.	Sq.m	944.11		
19-60-1	Gachi pitching done with silt clearance and berm dressing.	Sq.m	768.96		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	

SECTION – 20

OUTLETS

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

2. THE ITEMS OF WORK INVOLVED IN CONSTRUCTION OF OUTLETS SUCH AS EARTH WORK, CONCRETE AND BRICK WORK SHALL BE PAID FOR UNDER RESPECTIVE ITEMS OF THE RELEVANT SECTION

3. THE MANUFACTURE, SUPPLY AND DELIVERY TO SITE OF A.P.M AND / OR O.F. OUTLETS IRON BLOCKS SHALL BE THE RESPONSIBILITY OF THE DEPARTMENT

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
20-1	Earth work for outlets consisting of excavation, consolidation of earth after refilling, ramming and puddling.				
a)	Channels discharge upto 50 cusecs (1.416 Cu.m.per second)	Each	2776.80		
b)	Channels discharge above 50 cusecs to 100 cusecs (1.416 Cu.m. to 2.832 Cu.m. per second)	Each	3844.80		
c)	Channels discharge above 101 cusecs to 200 cusecs (2.832 Cu.m. to 5.663 Cu.m. per second)	Each	5767.20		
d)	Channels discharge above 201 cusecs to 350 cusecs (5.663 Cu.m. to 9.911 Cu.m. per second)	Each	7689.60		
e)	Channels discharge above 350 cusecs (9.911 Cu.m. per second)	Each	11320.80		
20-2	Dismantling outlets including removal of material from site. The earthwork for outlets shall be paid under item 20-1				
a)	Old types such as K.G.O's orifices	Each	2776.80		
b)	A.P.M. or O.F. "H" upto 2 ft. (0.61 m.)	Each	4272.00		
c)	A.P.M. or O.F. "H" above 2 ft. to 3 ft.(0.61 m. to 0.91 m.)	Each	5767.20		
d)	A.P.M. or O.F. "H" above 3 ft.(0.91 m.)	Each	7048.80		
e)	Tail cluster bifurcation	Each	4272.00		
f)	Tail cluster trifurcation	Each	5767.20		
g)	Tail cluster quardifircation	Each	7048.80		
20-3	Making temporary A.P.M. bricks block and fixing at site.	Each	1284.00	2395.65	
20-4	Dismantling walls, taking out temporary A.P.M. brick block, fixing iron block and rebuilding the dismantled walls.	Each	2888.40		
20-5	Dismantling walls and fitting iron block of O.F. outlet.	Each	2888.40		
20-6	Constructing, watching and removing bund for outlet built in running water.				
a)	Upto 3 ft. (1 m.) height	Each	6835.20		
b)	Above 3 ft. (1 m.) height	Each	9398.40		
20-7	Adjusting "B" of tail cluster by dismantiling and rebuilding throat walls.	Each	1529.40	3041.65	
20-8	Adjusting "Y" of an A.P.M. outlet including dismantiling and rebuilding.	Each	2908.80	5390.59	
20-9	Fixing A.P.M. and/or O.F. outlet blocks including dressing of bricks.				
a)	For channel depth upto 1.5 ft. (0.5 m.)	Each	1540.80	1782.62	
b)	For channel depth above 1.5 ft.to 3 ft. (0.5 m.to 1m)	Each	1797.60	2109.47	
c)	For channel depth above 3 ft.to 5 ft. (1 m.to 1.5 m)	Each	2311.20	2710.07	
d)	For channel depth above 5 ft. (1.5 m)	Each	3287.04	3685.91	
20-10	Repairing damaged reducing collar of Hume pipe outlets.	Each	1284.00	1824.23	
20-11	Laying iron pipes for outlets	R.M	205.44		
20-12	Water allowance for constructing outlets or culverts when canal water is not flowing				
a)	For channel depth upto 1.5 ft. (0.5 m.)	Each	1708.80		
b)	For channel depth above 1.5 ft.to 3 ft. (0.5 m.to 1m)	Each	2136.00		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
c)	For channel depth above 3 ft.to 5 ft. (1 m.to 1.5 m)	Each	3097.20		
d)	For channel depth above 5 ft. (1.5 m)	Each	4272.00		
20-13	Hoisting and placing R.C. slab or stone in position on outlets or W.C culverts.	Each	1304.40		
20-14	Fixing pipe culverts including back-filling of earth and puddling				
a)	Portion under bank	R.M	888.96	999.96	
b)	Portion under road beyond bank	R.M	404.04	515.04	
20-15	Removing pipe outlets and refilling earth including ramming and puddling.				
a)	Portion under bank	R.M	768.96		
b)	Portion under road beyond bank	R.M	299.04		
20-16	Changing pipe outlets by removing one pipe and replacing it at the same site with another pipe including earthwork and puddling				
a)	Portion under bank	R.M	1044.84	1155.84	
b)	Portion under road beyond bank	R.M	487.20	598.20	

SECTION – 21

ROAD AND ROAD STRUCTURES

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS AND SITE CLEARANCE

2. THE RATES INCLUDE THE PROVISION AND MAINTENANCE OF FIELD TEST LABORATORY STAFF, COST OF MATERIAL FOR TESTING ETC.

3. PAYMENT FOR ITEMS OF ROADS AND ROAD STRUCTURE SHALL BE MADE FROM THIS SECTION

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
21-1	Excavation or cutting to a required grade, camber and side slopes including dressing top and sides and disposal of excavated material within a lift of 5ft (1.5m) and lead upto 100 ft. (30m)				
a)	In all kinds of soil except gravelley, murum, wet silt, clay or mud.	Cu.m	32.04	423.72	
b)	Wet silt, clay or mud	Cu.m	32.04	443.30	
c)	Gravelly soil	Cu.m	32.04	462.89	
d)	Murum soil	Cu.m	32.04	517.72	
e)	Existing shingle road for placing sub-base or base course	Cu.m	32.04	658.73	
f)	Extra if excavated earth is required to be filled in road embankment by placing it in layers not exceeding 9" (230mm) in depth including dressing top and sides of the bank.	Cu.m	32.04		
21-2-1	Excavation or cutting in soft rock by hammering, chiselling and pick or jumper work and disposal of the excavated matertial within a lift 5 ft. (1.5m) and lead upto 100 ft. (30m).	Cu.m	1368.00		
21-3-1	Excavation or cutting in soft rock by blasting and disposal of excavated material within a lift of 5 ft. (1.5m) and lead upto 100 ft. (30m)	Cu.m	1314.60		
21-4-1	Excavation or cutting in hard rock by blasting and disposal of excavated material within a lift of 5 ft. (1.50m) and lead upto 100 ft. (30m)	Cu.m	2212.20		
21-5	Excavation or cutting in hard rock by hammering & chiselling and disposal of excavated material within a lift of 5 ft (1.5m) and lead upto 100 ft (30m)				
a)	Soft rock, slate, shale, schist or laterite work with pick and crow bar	Cu.m	1058.77	1270.53	
b)	Medium hard rock requiring occasional blasting	Cu.m	1370.42	1918.59	
21-6	Making earthen embankment with earth taken from approved borrow pits including cost of excavation, placing in layers not exceeding 9" (230mm) in depth including dressing top and sides of the bank within a lift of 5 ft. (1.5m) and lead upto 100 ft. (30m). (Excluding the royality of Earth, Compaction and its carriage)				
a)	In all kinds of soil except gravelly, murum, wet silt, clay or mud and rock.	Cu.m	29.90	207.80	
b)	In wet silt, clay and mud	Cu.m	29.90	278.68	
c)	In gravelly soil	Cu.m	29.90	491.32	
d)	In murum soil	Cu.m	29.90	457.99	
21-7 a)	Extra for every 50 ft (15 m) additional lead or part thereof upto 820 ft.(250m) over items 21-1 and 21-6 for soft, ordinary, hard and very hard soil	Cu.m	4.27		
b)	Extra for lift beyond first 5 ft. (1.5 m.) and upto 10 ft. (3m.) over items 21-1 and 21-6.	Cu.m	42.72		
21-8 a)	Extra for every 50 ft. (15m) additional lead or part thereof upto 820 ft. (250m) for items 21-2 to 21-5 for gravel, shingle or rock. (including royalty of Quarry).	Cu.m	6.41		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Extra for lift beyond first 5 ft. (1.5 m) and upto 10 ft. (3 m.) over items 21-2 to 21-5.	Cu.m	53.40		
c)	Extra for additional lift for every 5 fts beyond 10 ft. (3 m.) over items 21-2 to 21-5.	Cu.m	70.49		
21-9-1	Compaction of earthen embankments to full depth and width below sub-grade level by mechanical means in layers not exceeding 8" (200mm) in depth at optimum moisture content including watering and mixing by mechanical means. The sub-grade embankments shall be compacted to at least 95% modified AASHTO maximum dry density for their full depth and width.	Cu.m	14.95	339.77	
21-10 a)	Preparation and compaction upto 95% modified AASHTO of natural ground upto a depth of 8" (20mm) in ordinary soil.	Sq.m	5.13	35.09	
b)	Clearing and grubbing (removal) of roots including scarifying natural ground upto 8" (20mm) depth and disposal of roots.	Sq.m	3.52	33.20	
21-11-1	Preparation of subgrade over top of compacted embankment to at least 95% modified AASHTO maximum dry density with required dressing including cutting to required grade, camber and side slopes and disposal of surplus material within a lead of 90m	Sq.m	53.40	86.61	
21-12	Preparation of sub-grade over bottom of excavation with required dressing to required grade, camber and side slopes including cutting to required depth and breaking clods, watering and consolidation with suitable mechanical means to attain maximum density of 95% modified AASHTO for top 6" (150mm) layer including disposal of surplus earth within a lead of 90m.	Sq.m	112.14	363.67	
21-13-1	Providing and spreading murum (stone dust) of approved quality over stone metalling (water bound macadam) or brick ballast. Watering and consolidation with road roller including all lead and lift. (murum upto 25% of road metal) (including royalty of Quarry).	Cu.m	1064.04	3456.54	
21-14-1	Spreading already excavated material available at site over metalling, watering, consolidation with road roller, pre-stacking of excavated material including all lead and lift.	Cu.m	1064.04	1914.54	
21-14 A	Providing and laying stone soling 6" thick with stone available at site to required grade and camber including packing with spawls, chips, watering, compacting with road roller and with all lead and lift. (excluding royality of Quarry)	Cu.m	1187.16	1357.26	
21-14 B	Providing and laying stone soling 6" thick with approved stone to required grade and camber including packing with spawls, chips, watering, compacting with road roller and with all lead and lift.(including royalty of Quarry).	Cu.m	1187.16	4063.56	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
21-15 a)	Providing and laying crushed stone of any thickness to required grade and camber including packing with spawls, chips, watering, compacting with road roller with all lead and lift. (including royalty of Quarry).	Cu.m	213.60	3492.84	
b)	Providing and laying pitrun gravel in sub base or base course of any thickness to required grade and camber including watering and compacting with road roller with all lead and lift. (compacted thickness to be measured)	Cu.m	213.60	2161.67	
c)	Providing and laying Granular sub base using Crushed Stone Aggregate of approved thickness to required grade and camber including watering compacting with mechanical means and with all lead and lift. (compacted thickness to be measured) (including royalty of Quarry).	Cu.m	213.60	3075.75	
21-16-1	Providing and laying, soling bricks sand grouted laid on edges in herring bond or any other approved pattern to required grade and camber including rolling with power roller with all lead and lift.	Sq.m	421.58	1573.47	
21-17-1	Providing and laying graded aggregate base course of crushed stone of approved quality, including placing, mixing, spreading, watering and compacting base course to required depth, camber and grade to achieve 100% max. modified AASHTO dry density conforming to AASHTO specifications T -180, with mechanical means and with all lead and lift. (Carriage of crushed stone is included in the rate, within 5km of Project premises).	Cu.m	213.83	4140.55	
21-18-1	Providing and laying stone ballast 1.5” to 2.5” (37.5mm - 62.5mm) including blending with the stone dust or any other granular material approved by the Engineer-incharge. Consolidating by mechanical interlocking through rolling to required grade depth and camber to achieve 100% modified AASHTO dry density including placing, mixing, spreading watering and compacting with all lead and lift. (Carriage of stone ballast is included in the rate, within 5km of Project premises).	Cu.m	249.00	4610.96	
21-19-1	Surface dressing in one coat with bitumen 80/100 or any other approved grade using 40 lbs of bitumen and 5 cu.ft. of 1/2" size approved crushed aggregate per 100 Sq.ft (1.95 kg. of bitumen and 0.015 cu.m. of 1/2" size crushed aggregate per sq.m.) of road surface compacted with rolling. (including royalty of Quarry).	Sq.m	66.40	504.59	
21-20-1	Surface dressing in two coats including supply of bitumen 80/100 or any approved grade and approved crushed aggregate of approved size and grade for road surface with rolling (including royalty of Quarry).	Sq.m	84.43	755.97	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
21-21-1	Surface dressing in three coats including supply of bitumen 80/100 or any approved grade and bajri of approved size and grade, of road surface with rolling.	Sq.m	113.38	820.64	
21-22-1	Surface dressing on old surface with bitumen 80/100 or any other approved grade using 27 lbs. of bitumen with 4 Cu.ft of 1/4" or down grade approved crushed aggregate per 100 Sq.ft (1.22 kg. of bitumen with 0.012 Cu.m. per Sq.m. of 6.4 mm standard size crushed aggregate) of road surface with rolling.	Sq.m	168.47	535.62	
21-23-1	Providing and applying prime coat of liquid asphalt (cut back) of any approved grade using asphalt (cut back) including cleaning and brooming of road surface.				
a)	1.07 kg. per sq.m	Sq.m	4.36	404.14	
b)	0.515 kg. per sq.m	Sq.m	4.36	205.69	
21-24-1	Providing and applying tack coat of bitumen 80/100 or 60/70 or of any approved grade using bitumen at including cleaning and brooming of road surface				
a)	0.75 kg. of bitumen per sq.m.		4.36	123.34	
b)	0.308 kg. of bitumen per sq.m.		4.36	75.07	
21-25-1	Surface dressing with bitumen 80/100 or any other approved grade on a priming coat of liquid asphalt (cut-back) of any approved grade using primer at 22 lbs. and bitumen at 35 lbs. with 5 cu.ft. of 1/2" and down gauge crushed aggregate per 100 sq.ft (primer at 1.07 kg and bitumen 1.71 kg with 0.015 cu.m. of 13 mm and down gauge crushed aggregate per sq.m.) of road surface with rolling.(including royalty of Quarry).	Sq.m	150.10	879.83	
21-26-1	Providing and laying 1-1/2" (37.5 mm) consolidated thickness of asphalt concrete (road mix) using bitumen 80/100 or 60/70 or any approved grade with premixed coarse coarse sand flushing including compaction etc. (including royalty of Quarry).	Sq.m	410.68	1813.95	
i)	Using 3.5 lbs of bitumen per cu.ft. of 1/2" size crushed stone aggregate at 12 cu.ft per 100 sq.ft and 8 lbs of bitumen per cu.ft of coarse sand at 6 cu.ft per 100 sq.ft (56.06 kg bitumen per cu.m of 13 mm standard size crushed aggregate at 0.037 cu.m per sq.m. and 128.14 kg of bitumen per cu.m. of coarse sand at 0.018 cu.m. per sq.m) for asphalt concrete.				
ii)	Sand flushing with 2 cu.ft of sand mixed with 16 lbs of bitumen per 100 sq.ft.of road surface including 5 lb of bitumen per 100 sq.ft. of road surface (0.006 sq.m of sand mixed with 0.78 kg of bitumen per sq.m of road surface including 0.24 kg of bitumen per sq.m.of road surface for painting edging with rolling.				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
21-27-1	Providing and laying 2" (50 mm) consolidated thickness of asphalt concrete (road mix) using bitumen 80/100 of 60/70 or any approved grade with premixed coarse coarse sand flushing. (including royalty of Quarry).	Sq.m	410.68	2154.47	
i)	Using 3.5 lbs of bitumen per cu.ft. of 3/4" size crushed stone aggregate at 16 cu.ft per 100 sq.ft and 8 lbs of bitumen per cu.ft of coarse sand at 8 cu.ft per 100 sq.ft (56.06 kg bitumen per cu.m of 19 mm standard size crushed aggregate at 0.049 cu.m per sq.m. and 128.14 kg of bitumen per cu.m. of coarse sand at 0.024 cu.m. per sq.m) for asphalt concrete.				
ii)	Sand flushing with 2 cu.ft of sand mixed with 16 lbs of bitumen per 100 sq.ft.of road surface including 5 lb of bitumen per 100 sq.ft. of road surface (0.006 sq.m of sand mixed with 0.78 kg of bitumen per sq.m of road surface including 0.24 kg of bitumen per sq.m.of road surface for painting edging with rolling.				
21-28-1	Providing and laying 2-1/2" (62.5 mm) consolidated thickness of asphalt concrete (road mix) using bitumen 80/100 of 60/70 or any approved grade with premixed coarse coarse sand flushing. (including royalty of Quarry).	Sq.m	410.68	2481.22	
i)	Using 3.5 lbs of bitumen per cu.ft. of 1" size crushed stone aggregate at 20 cu.ft per 100 sq.ft and 8 lbs of bitumen per cu.ft of coarse sand at 10 cu.ft per 100 sq.ft (56.06 kg bitumen per cu.m of 25 mm standard size crushed aggregate at 0.06 cu.m per sq.m. and 128.14 kg of bitumen per cu.m. of coarse sand at 0.03 cu.m. per sq.m) for asphalt concrete.				
ii)	Sand flushing with 2 cu.ft of sand mixed with 16 lbs of bitumen per 100 sq.ft.of road surface including 5 lb of bitumen per 100 sq.ft. of road surface (0.006 sq.m of sand mixed with 0.78 kg of bitumen per sq.m of road surface including 0.24 kg of bitumen per sq.m.of road surface for painting edging with rolling.				
21-29-1	Providing and laying 1" (25 mm) consolidated thickness of premixed sheet asphalt using liquid asphalt (cut-backs) of approved grade using cut-backs at 20 lbs per 100 sq.ft (0.976 kg per sq.m.) for tack coat 3.5 lbs per cu.ft of 1/2" (56.06 kg per cu.m of 13 mm) standard size crushed stone at 5.50 cu.ft per sq.ft and 8 lbs of bitumen per cu.ft (0.016 cu.m. per sq.m. and 128.14 kg per cu.m.) or coarse sand at 5.50 cu.ft per 100 sq.ft (0.016 cu.m. per sq.m) of road surface, with rolling (including royalty of Quarry).	Sq.m	223.60	1377.83	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
21-30-1	Providing and laying hot-mix bituminous concrete runway pavement laid with mechanical paver and mixed in central mixing plant in required thickness and density, rolled hot with different types of rollers complete as per specifications and job-mix formula and design upto 1.5 " (37.5 mm) thickness.	Ton	4660.99	25465.04	
21-31-1	Providing and laying hot-mix bituminous concrete runway pavement laid with mechanical paver and mixed in central mixing plant in required thickness and density, roled hot with different types of rollers complete as per specifications and job-mix formula and design upto 3" (75mm) thickness.	Ton	4234.15	23934.98	
21-32	Providing and laying hot-mix bituminous concrete in road pavement laid with mechanical paver and mixed in central mixing plant in required thickness and density, rolled hot with different types of rollers complete as per specifications and job-mix formula and design in single layer				
a)	1" (25 mm) thick.	Sq.m	399.86	1533.41	
b)	1-1/2" (37.5 mm) thick	Sq.m	599.79	2300.11	
c)	2" (50 mm) thick	Sq.m	799.72	3066.81	
21-33	Providing and laying hot-mix bituminous concrete in road pavement laid with mechanical paver and mixed in central mixing plant in required thickness and density, rolled hot with different types of rollers complete as per specifications and job-mix formula and design in double layers				
a)	2-1/2" (75 mm) thick	Sq.m	877.30	3545.86	
b)	3" (75 mm) thick	Sq.m	1052.75	4255.03	
21-34 a)	Providing and laying 4" (100 mm) thick not leaner than 1:2:4 cement concrete in roads, paths, creteways using 3/4" (19mm) and down gauge crushed stone in panels of approved size laid to required gradient and camber over any sub-grade including cost of necessary formwork and its removal, compacting with vibrators (immersion or screed or both) belting the surface with canvas belt, roughening the surface after laying concrete with brush and curing.(including royalty of Quarry).	Sq.m	303.60	1783.91	
b)	Extra for every additional thickness of 1/2" (13 mm) concrete	Sq.m	39.47	231.91	
c)	Deduction for every lesser thickness of 1/2" (13mm)	Sq.m	39.47	231.91	
21-35 a)	Same as Item No.21-34 but with 1:3:6 cement concrete instead of 1:2:4	Sq.m	303.60	1429.68	
b)	Extra for every additional thickness of 1/2" (13mm) concrete	Sq.m	39.47	185.86	
c)	Deduction for every lesser thickness of 1/2" (13mm)	Sq.m	39.47	185.86	
21-36 a)	Same as Item No.21- 34 but with 1: 1.5 :3 cement concrete instead of 1:2:4	Sq.m	303.60	2065.06	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Extra for every additional thickness of 1/2" (13mm) concrete	Sq.m	39.47	268.46	
c)	Deduction for every lesser thickness of 1/2" (13mm)	Sq.m	39.47	268.46	
21-37-1	Providing and laying bitumenised water proof paper of best quality under cement concrete.	Sq.m	85.44	831.36	
21-38-1	Providing and laying polythene sheet 0.005" thick (0.05mm 500gauge) under cement concete.	Sq.m	85.44	463.44	
21-39-1	Providing and laying 2" (50 mm) thick sand cushion (blanket course) under cement concrete.	Sq.m	64.08	174.29	
21-40-1	Providing and laying 1:4:8 cement concrete in any thickness using 1-1/2" (37mm) and down gauge stone ballast of approved grade and quality over prepared sub-grade or sand cushion in roads, paths crete-ways laid to required gradient and camber including cost of necessary formwork and its removal compacting with vibrators including curing.	Cu.m	3682.20	12247.93	
21-41 a)	Providing fabricating and laying M.S. reinforcement bars Grade 36 with and including the cost of straightening, cutting, bending, binding, wastage and such overlaps as are not shown in the drawings, binding wire, cement concrete 1:2:4 precast or M.S. chairs and placing in position on cement concrete precast or M.S chairs, tying with binding wire etc., in all kinds of R.C.C. roads, paths and runways etc.	Ton	12206.40	290444.40	
b)	Same as Item no. 21-31 (a) except Grade 40 steel reinforcement bars to be used instead of M.S. Grade 36 reinforcing bars.	Ton	12206.40	314936.40	
c)	Extra over item no. 21- 31 (b) for deformed Grade 60 bars instead of Grade 40 reinforcing bars.	Ton	12206.40	314936.40	
21-42-1	Providing and laying M.S. ties or dowel bars of required length and diameters in longitudinal, transverse or other type of joints of cement concrete slabs laid and held in position in formwork or on precast chairs at various spacings including straightening, cutting, wastage, etc. and including the cost of M.S sheet caps, painting and greasing of bars where required as per design.	Ton	12206.40	297415.07	
21-43-1	Providing and spreading bajri of any size and upto any thickness to template in paths and drive ways including watering and rolling with hand roller complete with all lead and lift. (including royalty of Quarry).	Cu.m	854.40	2752.80	
21-44-1	Providing and spreading coarse sand to template in paths and drive ways including watering and rolling with hand roller complete, with all lead and lift.	Cu.m	854.40	2742.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
21-45-1	Providing bitumen filler of approved proprietary brand in expansion joints using 90lbs of bitumen, 0.2lbs of cement and 0.8cu.ft of sand per cu.ft (1442 kg of bitumen, 3.2kg of cement and 0.8cu.m. per cu.m.) of filler and fixing in position in an approved manner or as directed by the Engineer.	R.M	14.04	714.78	
21-46-1	Providing and fixing PVC water-stop expansion joint plain 6" to 7" (150mm to 175mm) wide placed horizontally at 2" (50mm) depth from top surface of pavement, 1/2" (13mm) wide joint filler of fibre board in bottom and top filled with premoulded bitumen filler of approved proprietary brand.	R.M	1105.20	2882.00	
21-47-1	Providing and filling dummy joint 1/4" (6.4mm) wide and 3" (75mm) deep in roads, paths or crete-ways etc. with premoulded bitumen filler of approved proprietary brand.	R.M	14.04	189.22	
21-48	Providing and making formwork for longitudinal joint of tongued and grooved type in RCC or cement concrete pavement	R.M		85.33	
21-49-1	Providing water tight joint, with 5" (125mm) wide copper strip of 24 BWG corrugated at centre and 1-1/2" (37.5mm) dia. staggered holes at 4" (100mm) pitch placed horizontally at 2" (50mm) depth from top surface of pavement, 1/2" (13mm) wide joint filler of soft wood at bottom and top filled with plastic bitumen No.4	R.M	101.10	2829.42	
21-50	Same as 21-49-1 but with joint filler of fiber board instead of soft wood.	R.M	101.10	2932.24	
21-51-1	Filling longitudinal construction keyed joints with rubber sealing compound of approved brand.	R.M	67.40	181.38	
21-52-1	Providing and fixing in position cork sheet of required width and depth in expansion joints including painting two coats with tar coal.	R.M	67.40	590.25	
21-53-1	Providing and fixing 6" x 6" x 30" (150mm x 150mm x 750mm) precast 1:2:4 cement concrete boundary pillars using graded crushed aggregate embedded in cement concrete 1:4:8 including formwork and its removal, compacting and curing including cost of excavation. (including royalty of Quarry).	Each	363.60	1980.55	
21-54-1	Providing and fixing 6"x6"x30" (150mmx150mmx750mm) stone boundary pillars embedded in cement concrete 1:4:8 including cost of excavation, cement concrete 1:4:8, backfilling of excavated stuff, cement plaster with 1:3 cement mortar, engraving and writing	Each	577.20	1763.51	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
21-55-1	Providing and fixing 9" x 4" x 30" (230mm x 100mm x 750mm) precast 1:2:4 cement concrete kilometer stone using graded screened bajri, embedded in cement concrete 1:4:8, formwork and its removal, compacting and curing including the cost of excavation, cement cost 1:4:8 backfilling of excavated stuff, cement plaster with 1:3 cement engraving and writing letters of approved size, painting two coats as desired.	Each	363.60	2085.44	
21-56-1	Providing and fixing 9" x 4" x 30" (230mm x 100mm x 750mm) kilometer stone of local quarry of hard texture with top one foot chisel-dressed on all sides as per approved design embedded in cement concrete 1:4:8 including cost of excavation, cement concrete 1:4:8 backfilling of excavated stuff engraving and writing letters of approved size, painting 2 coats as desired.	Each	577.20	1549.73	
21-57-1	Providing and fixing 42" x 18" x 12" (1050mmx 450mmx 300mm) 1:2:4 cement concrete precast kilometer stone of approved design with triangular face using graded screened bajri embedded in cement concrete 1:4:8, formwork and its removal, compacting curing including cost of excavation, embedding in cement concrete 1:4:8, backfilling of excavated stuff cement plaster with 1:3 cement mortar, engraving and writing letters of approved size and painting 2 coats as desired.	Each	1754.40	7331.17	
21-58-1	Providing and laying kerb stone 18" x 12" x 6" (450mm x 300mm x150mm) obtained from approved quarry, chisel dressed on top and sides, laid in cement mortar 1:4 ruled cement pointing in cement mortar 1:3 including cost of excavation and backfilling of excavated stuff and its disposal within 30 m.	R.M	613.62	949.86	
21-59-1	Providing and laying road kerb of 1st class burnt brick masonry laid in cement mortar 1:4, 9" (230mm) wide and 12" (300mm) deep with round moulded corners of bricks including cost of excavation and backfilling of excavated stuff and its disposal within 30m.	R.M	392.22	1314.86	
21-60	Providing and laying road kerb of precast cement concrete 24"x6"x12" (600mm x150mm x300mm) using crushed aggregate, formwork and its removal, compacting and curing laid in cement mortar 1:4 & cement plaster 1:4 neatly finished including cost of excavation, backfilling of excavated stuff & its disposal within 30m				
a)	Road kerb of precast cement concrete 1:2:4	R.M	74.41	1550.20	
b)	Road kerb of precast cement concrete 1:3:6	R.M	74.41	1423.72	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
21-61	Providing and laying road kerb 4" wide and 12" deep (100mm x 300mm) cast in situ, of cement concrete using crushed aggregate, formwork and its removal, compacting and curing, filling joints with bitumen, cement plaster 1:4 neatly finished including cost of excavation, backfilling of excavated stuff and its disposal with 30m. lead.				
a)	Road kerb of precast cement concrete 1:2:4	R.M	102.44	744.96	
b)	Road kerb of precast cement concrete 1:3:6	R.M	102.44	665.55	
21-62	Removing the existing worn out bituminous surface, having pot holes and ruts in patches of regular shape brushing and recarpeting with asphalt macadam as per specifications including disposal of excavated stuff within one chain (30m.) lead.				
a)	1" (25 mm) thick reconsolidated recarpeting.	Sq.m	1977.12	3131.35	
b)	2" (50mm) thick rconsolidated recarpeting.	Sq.m	2201.62	3945.41	
c)	2-1/2" (63mm) thick consolidated recarpeting.	Sq.m	2201.62	4272.16	
21-63-1	Dismantling bitumen carpet of any description from existing road surface including its removal and disposal within 90m lead. (0-15 cm thickness)	Sq.m	106.80		
21-64-1	Dismantling of stone metalling from existing road from where bitumen carpet has already been removed including disposal within 90m lead.(0-30 cm thickness)	Sq.m	160.20		
21-65-1	Dismantling brick metalling from existing road from where bitumen carpet has already been removed including disposal within 90m lead. (0-60 cm)	Sq.m	213.60		
21-66-1	Dismantling brick soling from existing road from where bitumen carpet & stone metalling has already been removed including disposal of excavated stuff within 90m lead.(0-30 cm thickness)	Sq.m	117.48		
21-67-1	Dismantling soling stone from existing road from where bitumen carpet and stone metalling have already been removed including disposal of surplus material within 90m lead. (0-30 cm thickness)	Sq.m	106.80		
21-68-1	Cutting the worn out surface in all kinds of cement concrete roads having pot holes and ruts upto any depth and any shape incuding disposal of excavated stuff within 90 m. lead. (0-30 cm thickness)	Sq.m	256.32		
21-69-1 a)	Scarifying sub-base, base or wearing coat surface of flexible pavement with pick axes or/by any other approved means upto required depth including disposal of rubbish within 90 m.	Sq.m	106.80		
b)	Making grooves in existing bitumen carpet/TST of any description including removal and disposal within 90 m. lead		117.48		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
21-70-1	Screening existing stone or brick metal or crushed aggregate in different screens of any size and mesh along side of alignment including stacking in different grades and disposal of surplus stuff within 90 m. lead.	Cu.m	640.80		
21-71-1	Filling joints or cracks with bitumen upto any depth and width including brushing, washing with kerosene oil and blending with sand.	Cu.m	4536.00	209578.55	
21-72	Cutting trenches through bituminous road for laying pipe etc. in any width and upto required depth including dismantling kerb stones, edge stones or channels, replacing soling stones (old and 10% new) with hand refilling with (old and 25% new) ballast blinded with murum, watering and ramming complete, refixing edge stone, kerb stones in cement mortar 1:3 including recarpeting with (consolidated) asphalt macadam as per specification (cost of new stone, ballast and new murum is inclusive).(including royalty of Quarry).				
a)	1"(25mm) thick consolidated asphalt macadam recarpeting	Sq.m	1473.84	2781.62	
b)	2" (50 mm) thick consolidated asphalt macadam recarpeting	Sq.m	1473.84	3409.83	
c)	2-1/2" (63 mm) thick consolidated asphalt macadam recarpeting	Sq.m	1473.84	3780.74	
21-73	Cutting trenches through cement concrete road with chisel etc. in any width upto required depth including dismantling kerb stones, edge stones, refilling with cement concrete 1:2:4 using crushed graded boulders of required size and grade including compacting with vibrators refixing edge stones, kerb stones in cement mortar 1:3				
a)	4" (100 mm) thick 1:2:4 concrete relaying	Sq.m	2474.16	4258.07	
b)	Extra for every 1/2" (13mm) thickness over 4" (100mm) thick cement concrete 1:2:4.	Sq.m	325.79	557.70	
21-74	Excavation in all kind of soils in trenches and channels including dressing to required section and back-filling of excavated stuff including watering, ramming in layers including disposal of surplus earth.				
a)	Lift upto 5 ft. (1.5 m.) and lead upto 100 ft. (30 m.)	Cu.m	1068.00		
b)	Extra for additional lift above 5 ft. to 10 ft. (1.5 m to 3 m.) and lead upto 100 ft. (30 m.)	Cu.m	854.40		
21-75	Providing and laying open jointed pipe with collar of class "C" or equivalent and fixing in trenches over prepared bed including cutting, wastage, with all lead and lift.				
a)	4" (100 mm) dia R.C.C pipe	R.M	339.36	704.76	
b)	6" (150mm) dia R.C.C pipe	R.M	339.36	918.96	
c)	4" (100mm) dia A.C pipe	R.M	339.36	937.86	
d)	6" (150mm) dia A.C pipe	R.M	339.36	1221.36	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
21-76	Providing and fixing R.C.C. pipe of class "C" or equivalent in trenches including cutting, wastage, fitting and jointing, with maxphalt composition and cement mortar 1 : 1 and testing with water including all lead and lift.				
a)	9" (225 mm) dia R.C.C pipe	R.M	339.36	1997.54	
b)	12" (300 mm) dia R.C.C pipe	R.M	339.36	2987.90	
21-77-1	Filling in trenches locally available aggregate of any size or grade available at site with or without blinding with coarse sand or fine aggregate including watering, dressing, consolidation by ramming in layers not exceeding 9" (225mm) in depth to full compaction including all lead and lift. (excluding royalty of Quarry).	Cu.m	427.20		
21-78-1	Providing and laying dry stone uncoarsed rubble pitching upto 12" (300mm) thick in bottom and sides of channel or drain. (including royalty of Quarry).	Cu.m	2054.40	4473.96	
21-79-1	Cement pointing to stone pitching in 1 : 2 cement mortar in channels or drains including curing and raking out joints.	Sq.m	1240.80	2043.35	
21-80	Providing and fixing G.I. pipe railing 2.5 ft high of required diameter, comprising vertical posts and horizontal bracings of G.I. pipe of the same dia including cost of specials, bends, threading cutting and making good the floor or wall and or slab of any kind in cement concrete 1:2:4 (Actual pipe length used for vertical posts and horizontal bracings to be measured, length of specials used not to be deducted)				
a)	2" (50 mm) dia G.I. pipe railing	R.M	459.15	2362.03	
b)	1-1/2" (40 mm) dia G.I. pipe railing	R.M	459.15	2044.81	
c)	1" (25 mm) dia G.I. pipe railing	R.M	459.15	1629.09	
21-81-1	Providing and fixing steel bearings of standard quality and type weighing not less than 90kg	Each set of one end	1890.00	39690.00	
21-82-1	Providing and fixing rubber bearing pad not less than 1" (25 mm) thick.	Sq.m	3.00	63.00	
21-83-1	Providing and laying dry brick pavement and/or soling in streets or roads over 1/2" (13mm) thick sand cushion incuding sand grouting, watering, compacting of bed to proper camber.	Cu.m	3249.60	8787.52	
21-84-1	Providing and fixing road sign boards such as caution etc as approved by the Engineer with reflective paints, having superfacial area of 1.125 sq.m including cost of post etc.	Each	4108.80	6133.69	
21-85 a)	Supply of asphalt concrete premixed bituminous carpet using bitumen 80/100 or of any approved grade with following percentage including compaction and finishing to required camber, grade and density. Coarse aggregate from approved source by Asphalt Batching Plant				
i)	3% Bitumen content	Cu.m		32446.71	
ii)	3.5% Bitumen content	Cu.m		34069.05	
iii)	4% Bitumen content	Cu.m		35772.50	
iv)	4.5% Bitumen content	Cu.m		37561.12	

Sr. No.		Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
				Labour	Composite	
	v)	5% Bitumen content	Cu.m		39439.18	
	vi)	5.5% Bitumen content	Cu.m		41411.14	
	vii)	6% Bitumen content	Cu.m		43481.70	
21-85	b)	laying of consolidated thickness of asphalt concrete premixed bituminous carpet using bitumen 80/100 or of any approved grade with following percentage including compaction and finishing to required camber, grade and density. Coarse aggregate from approved source. (Mechnical mean using Paver)	Cu.m			
	i)	3% Bitumen content	Cu.m		2766.20	
	ii)	3.5% Bitumen content	Cu.m		2766.20	
	iii)	4% Bitumen content	Cu.m		2766.20	
	iv)	4.5% Bitumen content	Cu.m		2766.20	
	v)	5% Bitumen content	Cu.m		2766.20	
	vi)	5.5% Bitumen content	Cu.m		2766.20	
	vii)	6% Bitumen content	Cu.m		2766.20	
21-85	c)	laying of consolidated thickness of asphalt concrete premixed bituminous carpet using bitumen 80/100 or of any approved grade with following percentage including compaction and finishing to required camber, grade and density. Coarse aggregate from approved source. (Without Paver)				
	i)	3% Bitumen content	Cu.m		2626.73	
	ii)	3.5% Bitumen content	Cu.m		2626.73	
	iii)	4% Bitumen content	Cu.m		2626.73	
	iv)	4.5% Bitumen content	Cu.m		2626.73	
	v)	5% Bitumen content	Cu.m		2626.73	
	vi)	5.5% Bitumen content	Cu.m		2626.73	
	vii)	6% Bitumen content	Cu.m		2626.73	
21-85	d)	Supply of consolidated thickness of asphalt concrete premixed bituminous carpet using bitumen 80/100 or of any approved grade with following percentage including compaction and finishing to required camber, grade and density. Coarse aggregate from approved source by Bitmac plant.	Cu.m			
	i)	3% Bitumen content	Cu.m		32446.71	
	ii)	3.5% Bitumen content	Cu.m		34069.05	
	iii)	4% Bitumen content	Cu.m		35772.50	
	iv)	4.5% Bitumen content	Cu.m		37561.12	
	v)	5% Bitumen content	Cu.m		39439.18	
	vi)	5.5% Bitumen content	Cu.m		41411.14	
	vii)	6% Bitumen content	Cu.m		43481.70	
21-86	a)	Reflectorized Plastic Pavement Stud (Raised Profile Type - Single)	No	53.40	401.40	
	b)	Reflectorized Plastic Pavement Stud (Raised Profile Type - Double)	No	53.40	473.40	
	c)	Reflectorized Plastic Pavement Stud (Flushed Profile Type - Single)	No	53.40	413.40	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
d)	Reflectorized Plastic Pavement Stud (Flushed Profile Type - Double)	No	53.40	473.40	
e)	Reflectorized Aluminium Pavement Stud (Raised Profile Type - Single)	No	53.40	593.40	
f)	Reflectorized Aluminium Pavement Stud (Raised Profile Type - Double)	No	53.40	665.40	
g)	Reflectorized Aluminium Pavement Stud (Flushed Profile Type - Single)	No	53.40	593.40	
h)	Reflectorized Aluminium Pavement Stud (Flushed Profile Type - Double)	No	53.40	833.40	
21-87 a)	P/F of synthetic rubber speed hump 5 Cm high & 35 Cm wide alternate black & yellow combination	R.M	106.80	4906.80	
b)	P/F of metal speed hump 5 Cm high & 35 Cm wide alternate black & yellow combination	R.M	106.80	19306.80	
21-88	Cold Milling of the Pavement				
a)	(0 to 30 mm)	Sq.m	64.08	193.82	
b)	(0 to 50 mm)	Sq.m	64.08	258.70	
c)	(0 to 70 mm)	Sq.m	64.08	420.88	
21-89-1	Scarification of existing road pavement.	Sq.m	10.68	55.68	
21-90	Supply and Fixing of Concrete pavers on sand cushion of different designs having thickness of 50 mm, mechnically compressed, minimium strenght of 4500 psi after laboratory testing at factory and random testiing at site as and when desired by the Engineer inchange comple in all respects.	Sq.m	169.49	1930.36	
21-91	Supply and Fixing of Concrete pavers on 3" thick sand cushion of different designs having thickness of 80 mm, mechnically compressed, minimium strenght of 7000 psi after laboratory testing at factory and random testiing at site as and when desired by the Engineer inchange comple in all respects.	Sq.m	363.60	2680.14	
21-92	Supplying and installation of hydraulically compressed PCC Kerb stone in natural colour, having strength of 3500 (Psi). Including cost of PCC.				
a)	Kerb Stone (300mm x 300mm x 150mm)	R.M	82.18	1161.10	
b)	Kerb Stone (300mm x 450mm x 150mm)	R.M	82.18	1320.94	
21-93	UV stabilized polypropylene Geotextile consisting of filaments of approximately 40 microns diameter as mentioned in specification or as per manufactures recommendation.	Sq.m	25.68	625.68	

SECTION – 22

SHEET PILING

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
22-1	Cutting Ransome or Larson or similar piles.	Per cut	427.20		
22-2	Cutting universal piles.	Per cut	640.80		
22-3	Driving steel piles above 7.5 m. to 9 m.	Sqm	10761.60		
22-4	Driving steel piles above 4.50 m. to 7.50 m.	Sqm	10329.60		
22-5	Driving steel piles upto 4.5 m.	Sqm	7737.60		
22-6	Dolleying piles.	Each	640.80		
22-7	Drilling holes in piles by hand.	Each	587.40		
22-8	Raising and lowering machine.	R.M.	39998.40		
22-9	Turning machine 90 degrees	Each Job	12307.20		
22-10	Turning machine 135 degrees	Each Job	20025.60		
22-11	Turning machine 180 degrees	Each Job	26035.20		
22-12	Travelling machine (light) in working area.	Per 30m	30221.40		
22-13	Loading and/or unloading piles.	Ton	640.80		
22-14	Dismantling piling machine.	Each Job	51600.00		
22-15	Erecting piling machine	Each Job	82348.80		
22-16	Carriage of piling machine under different conditions in working area.	Per 30m	12367.20		
22-17	Hire charges of piling plant with accessories including fuel, pay of operator and other mechanical staff, mobilization, demobilization and idle time.	Per day	57600.00		

SECTION – 23

PLUMBING, SANITARY INSTALLATIONS AND GAS FITTINGS

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
23-1	Providing and fixing European type glazed earthenware water closet ICL Boch/Forte or approved equivalent make including cost of inlet pipe, lid cistern kit, stop cock deluxe and other accessories, fitting material such as brackets, PVC down pipe where required, rubber rings/washers, making requisite number of holes in walls, plinth and floor for pipe connection and making good with approved material.				
a)	Water closet floride coupled/4030				
i)	White	Each	2031.60	34602.00	
ii)	Coloured	Each	2031.60	36282.00	
b)	W.C. fregate coupled/4006				
i)	White	Each	2031.60	35442.00	
ii)	Coloured	Each	2031.60	36282.00	
c)	W.C. non-coupled 7HU				
i)	White	Each	2031.60	37122.00	
ii)	Coloured	Each	2031.60	38682.00	
23-2	Providing and fixing squatting type water closet with integral treads ICL Boch/Karam Cera or approved equivalent make including cost of inlet pipe cistern and lid cistern kit, stop cock deluxe type and other accessories, fittings, brackets, PVC down pipe, rubber rings/washers, making requisite number of holes in walls, plinth and floor for pipe connection and making good with approved material.				
a)	W.C. Indian/Desi/902 with glazed earthen ware 4" (100 mm) trap				
i)	White	Each	2054.40	23677.92	
ii)	Coloured	Each	2054.40	24877.92	
b)	W.C. Orisa/Asian/900 with glazed earthen ware 4" (100 mm) trap				
i)	White	Each	2054.40	23677.92	
ii)	Coloured	Each	2054.40	24877.92	
23-3	Providing and fixing European type glazed earthenware water closet ICL Ifo/Forte or approved equivalent make including cost of inlet pipe, lid cistern kit, stop cock deluxe and other accessories, fitting material such as brackets, PVC down pipe where required, rubber rings/washers, making requisite number of holes in walls, plinth and floor for pipe connection and making good with approved material.				
a)	White	Each	2054.40	8824.80	
b)	Coloured	Each	2054.40	9184.80	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
23-4	Providing and fixing export quality ICL Boch/Karam Cera or equivalent make flat back lipped front urinal basin or glazed earthen ware with and including the cost of 1 gallon (4.5 lit) C.I automatic flushing cistern with fittings a pet cock C.I. or W.I. brackets standard flush pipe with fittings, standard waste pipe (enamelled iron) connection and making good with approved material.				
a)	Urinal 6003				
i)	White	Each	1540.80	16219.20	
ii)	Coloured	Each	1540.80	16579.20	
b)	Urinal 6001				
i)	White	Each	1540.80	16579.20	
ii)	Coloured	Each	1540.80	16579.20	
23-5	Providing and fixing export quality glazed earthen ware wash basin manufactured by ICL Boch/Karam Cera or equivalent approved make with single hole chromium plated mixer tap 1/2" (15mm), pillar tap delux, stop cocks, C.I. or W.I. brackets 6" (150mm) built into walls 1.5" (40mm) C.P. brass waste with malleable iron or C.P. brass trap with malleable iron or brass union and making requisite number of holes in walls, plinth and floor for pipe connections and making good with approved material.				
a)	Wash basin 18" (450 mm) without pedestal				
i)	White	Each	1540.80	19618.80	
ii)	Coloured	Each	1540.80	19978.80	
b)	Wash basin 24" (610 mm) Futura without pedestal				
i)	White	Each	1540.80	21178.80	
ii)	Coloured	Each	1540.80	21778.80	
c)	Wash basin 26" (650 mm) without pedestal				
i)	White	Each	1540.80	21658.80	
ii)	Coloured	Each	1540.80	22258.80	
d)	Extra over above for providing and fixing white glazed earthen ware pedestal manufactured by ICL/Karam Cera or approved equivalent make.				
i)	White	Each	1540.80	18418.80	
ii)	Coloured	Each	1540.80	18658.80	
23-6	Providing and fixing English or approved equivalent bath tub of desired colour with and including the cost of 1.5" dia. C.P. brass waste, 1.25" dia. brass overflow, (3/4") size C.P. brass pillar taps, C.P. brass chain with rubber plug and making required number of holes in walls plinth and floor for pipe connections and making good with approved material.				
a)	Porcelain enamelled cast iron bath tub 66" x 28" x 23" size	Each	5136.00	50076.00	
b)	Fibre glass bath tub 72" x 28" x 23"	Each	5136.00	39876.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
23-7	Providing and fixing ICL /Karam cera or approved equivalent make glazed earthen ware shower tray including fittings, bib cok, stop cock, shower kit, trap and making requisite numbers of holes and making good with approved material.	Each	5136.00	77880.77	
23-8	Providing and fixing stainless steel sink Pakistan made with C.I. or W.I brackets 6" built in wall, 1.5" (40 mm) rubber plug,C.P. brass chain, C.P. brass waste, pillar tap 2 way delux, 1.5" dia malleable iron or C.P. brass trap and unions and making requisite number of holes in walls, plinth and floor for pipe connections and making good with approved material.				
a)	Stainless steel sink 40" x 20" (1000 mm x 500 mm)	Each	2054.40	22979.04	
b)	Stainless steel sink 33" x 18" (825 mm x 450 mm)	Each	2054.40	19979.04	
23-9	Providing and fixing floor trap of approved self cleaning design with screwed down grating with or without a vent arm with and including making requisite number of holes in walls, plinth and floor for pipe connection and making good.				
a)	C.I. floor trap 6" x 2" and 6" x 3" size with grating.	Each	513.60	1137.60	
b)	C.I. floor trap 4" dia. inlet and outlet with C.I. grating.	Each	513.60	1293.60	
c)	C.I. floor trap 6" x 2" size with grating including concrete chamber all round	Each	513.60	1324.80	
d)	C.I. floor trap 6" x 4" size with grating including concrete chamber all round	Each	513.60	1356.00	
23-10	Providing and fixing white glazed earthen ware export quality bidet with fittings in bath room.	Each	1540.80	22099.20	
23-11	Providing and fixing standing shower concealed in wall with approved quality control valves, mixer unit and moveable shower head.	Each	2054.40	35714.40	
23-12	Providing and fixing C.P. brass telephonic shower including holder clamps, screw and bib cock.	Each	385.20	8053.20	
23-13	Providing and fixing approved quality chromium plated towel rail with bracket and screws.				
a)	Towel rail 24" x 3/4" (600mm x 20mm)	Sq.M	102.72	822.72	
b)	Towel rail 30" x 3/4" (750mm x 20mm)	Sq.M	102.72	942.72	
23-14	Providing and fixing approved quality C.P. brass toilet paper holder Master /Sonex or equivalent make.	Each	256.80	736.80	
23-15	Providing and fixing looking mirror of Belgium/ Malaysian/ Indonesian glass with chromium plated screws.	Each	513.60	1473.60	
23-16	Providing and fixing shelf of standard size.				
a)	Glass shelf of 24" x 5" size with guard rails & C.P. brackets.	Each	128.40	1928.40	
b)	Shelf (Master/Sonex make)	Each	128.40	2288.40	
23-17	Providing and fixing white glazed vitreous China squatting type W.C. pan with integral treads similar to Orissa type.				
a)	Without trap	Each	1027.20	10147.20	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Water Closet Vitreous China Trap With	Each	1027.20	2107.20	
23-18	Providing and fixing approved quality fixtures				
a)	European type White glazed earthen ware W.C. pan.	Each	1027.20	18547.20	
b)	Providing and fixing plastic flushing cistern of approved quality and colour.	Each	513.60	3297.60	
c)	Wash basin 18" (450 mm), White colour	Each	513.60	5913.60	
d)	Wash basin 24" (610 mm) ICL Futura make	Each	513.60	7473.60	
23-19	Providing and fixing ICL (Boch) or Karam Cera export quality glazed earthen ware cistern with lid and kit.				
a)	White	Each	513.60	15633.60	
b)	Coloured	Each	513.60	16473.60	
23-20	Providing and fixing approved qualty of Bacolite plastic seat with lid.	Each	128.40	968.40	
23-21	Providing and fixing glazed pottery/C.P. brass pull.	Each	128.40	428.40	
23-22	Providing and fixing rubber connection for flush pipe with European W.C.	Each	102.72	402.72	
23-23	Providing and fixing approved quality white glazed earthenware lavatory basin with 1/2" (15 mm) dia. single hole C.P. mixer tap, 2 way deluxe pillar tap, stop cocks, 6" C.I. or W.I. brackets built into walls, rubber plug, C.P. brass chain, C.P. brass waste, malleable iron or C.P. brass bottle trap with malleable iron or brass union and making requisite number of holes in walls, plinth and floor for pipe connection and making good with approved material.				
a)	Lavatory basin 22" x 16" (550 mm x 400 mm)	Each	1540.80	19018.80	
b)	Lavatory basin 25" x 18" (625 mm x 450 mm)	Each	1540.80	19618.80	
23-24	Providing and fixing approved quality glazed fire clay sink 24" x 18" with 6" (150mm) size C.I. or W.I. brackets built in walls, 1.5" (40 mm) rubber plug and C.P. brass chain, C.P. brass waste, pillar tap 2 way deluxe, malleable iron or C.P. brass trap and unions and making requisite numbers of holes in walls, plinth and floor for pipe connections and making good with approved material.	Each	2054.40	10139.04	
23-25	Providing and fixing C.P. chain for sink and lavatory basin.	Each	102.72	222.72	
23-26	Providing and fixing rubber plug for sink and lavatory basin.	Each	102.72	642.72	
23-27	Providing and fixing glazed earthen ware foot rest.	Each	256.80	1036.80	
23-28	Providing and fixing C.P. bottle trap with union and waste pipe				
a)	1.25" (30 mm) dia.	Each	513.60	2673.60	
b)	1.5" (40 mm) dia.	Each	513.60	4894.80	
23-29	Providing and fixing soap dish.				
a)	Chromium plated	Each	102.72	1002.72	
b)	Providing and fixing C.P. chain for sink and lavatory basin.	Each	102.72	522.72	
23-30	Providing and fitting superior quality plastic accessories of approved make				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
a)	Soap dish	Each	102.72	342.72	
b)	Toilet paper holder	Each	102.72	342.72	
c)	Towel rod	Each	102.72	402.72	
d)	Shelf 24" x 5" with bracket and railing.	Each	102.72	738.72	
23-31	Providing and fixing C.P. pillar-cock of superior quality of approved make.				
a)	1/2" (12 mm) dia.	Each	102.72	2982.72	
b)	3/4" (20 mm) dia.	Each	102.72	3534.72	
23-32	Providing and fixing C.P. stop-cock of superior quality of approved make.				
a)	1/2" (12 mm) dia.	Each	102.72	1341.12	
b)	3/4" (20 mm) dia.	Each	102.72		
23-33	Providing and fixing undergound stop-cock with superior quality C.P. cover of approved make.				
a)	1/2" (12 mm) size	Each	102.72	1941.12	
b)	3/4" (20 mm) size	Each	102.72	702.72	
23-34	Providing and fixing superior quality C.P. bib cock of approved make.				
a)	1/2" (12 mm) dia.	Each	102.72	2082.72	
b)	3/4" (20 mm) dia.	Each	102.72	1902.72	
23-35	Providing and fixing superior quality 1/2" size C.P. tee stop cock of approved make.	Each	102.72	2022.72	
23-36	Providing and fixing C.P. brass shower				
a)	1/2" (12 mm) dia inlet and 6" (150 mm) dia. detachable lid	Each	102.72	2742.72	
b)	1/2" (12 mm) dia inlet and 4" (100 mm) dia. detachable lid	Each	102.72	1362.72	
23-37	Providing and fixing 1/2" (12 mm) single hole superior quality C.P. mixer of approved make for wash hand basin, sink or shower.	Each	513.60	6513.60	
23-38	Providing and fixing 1" (25 mm) superior quality C.P. flushing valve of approved make for wash hand basin, sink or shower.	Each	513.60	1473.60	
23-39	Providing and fixing superior quality gun-metal peet/gate valve (Class150) of approved make.				
a)	Screwed ends				
i)	1/2" (12 mm) dia.	Each	256.80	2437.20	
ii)	3/4" (20 mm) dia.	Each	256.80	3448.80	
iii)	1" (25 mm) dia.	Each	385.20	4902.00	
iv)	1.25" (30 mm) dia.	Each	385.20	6686.40	
v)	1.5" (40 mm) dia.	Each	513.60	9434.40	
vi)	2" (50 mm) dia.	Each	513.60	14625.60	
vii)	2.5" (65 mm) dia.	Each	1797.60	30357.60	
viii)	3" (75 mm) dia.	Each	1797.60	36405.60	
ix)	4" (100 mm) dia.	Each	2568.00	48888.00	
x)	6" (150 mm) dia.	Each	2568.00	54408.00	
b)	Flanged ends				
i)	1/2" (12 mm) dia.	Each	770.40	4970.40	
ii)	3/4" (20 mm) dia.	Each	770.40	6530.40	
iii)	1" (25 mm) dia.	Each	1540.80	9340.80	
iv)	1.25" (30 mm) dia.	Each	1540.80	10900.80	
v)	1.5" (40 mm) dia.	Each	2054.40	13454.40	
vi)	2" (50 mm) dia.	Each	2054.40	17054.40	
vii)	2.5" (65 mm) dia.	Each	4108.80	23908.80	
viii)	3" (75 mm) dia.	Each	4108.80	29308.80	
ix)	4" (100 mm) dia.	Each	6163.20	34963.20	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
x)	6" (150 mm) dia.	Each	6163.20	39763.20	
23-40	Providing and fitting superior quality C.P. or brass oxidised 1/2" (12mm) swan neck pillar cock (tap) of approved make.				
a)	Single way	Each	256.80	3256.80	
b)	Providing and fitting superior quality C.P. or brass oxidised 1/2" (12mm) swan neck pillar cock (tap) of approved make.	Each	385.20	3745.20	
23-41	Providing and fixing brass bib cock/ stop cock of approved make.				
a)	1/2" (12 mm) dia.	Each	128.40	1100.40	
b)	3/4" (20 mm) dia.	Each	128.40	1388.40	
c)	1" (25 mm) dia.	Each	128.40	1388.40	
23-42	Providing and fixing 'P' trap including concrete chamber and C.I. grating.				
a)	Cast iron 4" (100 mm) size	Each	513.60	2141.10	
b)	Glazed 4" (100 mm) size	Each	513.60	1991.10	
23-43	Providing and fixing C.I. gully trap 6"x6"x4" including concrete embedment and cost of G.I. grating 6"x6" and masonry chamber 12"x12"	R.M	513.60	1742.10	
23-44	Providing, laying, cutting, jointing, testing and disinfecting cast iron soil pipe with spigot, socket chaulked lead or comet joint or flanged joints/tyton joints including cost of jointing material such as lead, comet and yarn.				
a)	2" (50 mm) dia.	R.M	134.88	2032.08	
b)	3" (75 mm) dia.	R.M	134.88	2950.08	
c)	4" (100 mm) dia.	R.M	134.88	3929.28	
23-45	Providing and laying Non Asbestos Cement Fibre building and sanitary pipe with cement chaulked or comet joint including cost of sockets, bends and specials.				
a)	2.5" (65 mm) inner dia.	R.M	337.20	802.32	
b)	3" (75 mm) inner dia.	R.M	337.20	1010.40	
c)	4" (100 mm) inner dia.	R.M	674.40	1653.60	
d)	6" (150 mm) inner dia.	R.M	674.40	2388.00	
23-46	Providing and fixing C.I. specials such as bend, tees, collars, cross, reducers, tail pieces, flanged spigots, cap, flanged socket, taper, angle bends and plugs including turning threading, facing and fitting for C.I. pipe line.				
a)	Cast iron S.S. specials with spigot and socket joint				
i)	3" to 6" (75 mm to 150 mm) dia.	Kg.	134.88	266.88	
ii)	8" to 12" (200 mm to 300 mm) inner dia.	Kg.	101.16	233.16	
iii)	15" to 18" (375 mm to 450 mm) inner dia.	Kg.	67.44	199.44	
b)	Cast iron flanged specials with flanged joints				
i)	3" to 6" (75 mm to 150 mm) dia.	Kg.	67.44	199.44	
ii)	8" to 12" (200 mm to 300 mm) inner dia.	Kg.	33.72	165.72	
iii)	15" to 18" (375 mm to 450 mm) inner dia.	Kg.	33.72	165.72	
c)	Cast iron specials with tyton joints				
i)	3" to 6" (75 mm to 150 mm) dia.	Kg.	33.72	189.72	
ii)	8" to 12" (200 mm to 300 mm) inner dia.	Kg.	33.72	213.72	
iii)	15" to 18" (375 mm to 450 mm) inner dia.	Kg.	33.72	249.72	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
23-47	Supplying and fitting C.I. manhole cover with frame weighing not less than 10.25 lbs/sq.ft (50 kg per sq.m.).				
a)	12" (300 mm.) dia.	Each	513.60	1035.60	
b)	18" (450 mm.) dia.	Each	513.60	1398.00	
c)	24" (600 mm.) dia.	Each	385.20	2082.00	
d)	12" (300 mm.) square	Each	513.60	1053.60	
e)	18" (450 mm.) square	Each	513.60	1729.20	
f)	24" (600 mm.) square	Each	770.40	2930.40	
23-48	Providing and fitting C.P. or oxidised gas cock 1/4" (6 mm) dia.				
a)	Single way	Each	385.20	1021.20	
b)	Double way	Each	385.20	1165.20	
c)	Three way	Each	385.20	1453.20	
23-49	Providing and fitting nipple or bush 1/4" x 3/8" (6mm - 10mm) inner dia.	Each	102.72	169.92	
23-50	Providing and fitting union/socket				
a)	1/2" (12 mm) dia.	Each	102.72	204.72	
b)	3/4" (20 mm) dia.	Each	102.72	234.72	
c)	1" (25 mm) dia.	Each	102.72	270.72	
23-51	Providing and fixing brass gas cock.				
a)	1/2" (12 mm) dia.	Each	102.72	204.72	
b)	3/4" (20 mm) dia.	Each	102.72	234.72	
23-52	Providing, laying, cutting, jointing, testing and disinfecting G.I. pipe ILL make or equivalent gas line including the cost of jointing material.				
a)	Light duty				
i)	1/2" (15 mm) inner dia.	R.M	184.32	812.64	
ii)	3/4" (20 mm) inner dia.	R.M	184.32	992.16	
iii)	1" (25 mm) inner dia.	R.M	210.62	1465.22	
iv)	1.25" (30 mm) inner dia.	R.M	210.62	1818.14	
v)	1.5" (40 mm) inner dia.	R.M	246.72	2164.32	
vi)	2" (50 mm) inner dia.	R.M			
23-53	Providing and fixing superior quality C.P. check valve of approved make for water supply or gas lines.				
a)	1/2" (12 mm) dia.	Each	128.40	1148.40	
b)	3/4" (20 mm) dia.	Each	128.40	1568.40	
c)	1" (25 mm) dia.	Each	256.80	2476.80	
d)	1.25" (30 mm) dia.	Each	385.20	2965.20	
e)	1.5" (40 mm) dia.	Each	513.60	4353.60	
f)	2" (50 mm) dia.	Each	727.20	6487.20	
23-54	Providing and fixing C.P. waste coupling.				
a)	1.25" (30 mm) dia.	Each	102.72	336.72	
b)	1.5" (40 mm) dia.	Each	102.72	396.72	
23-55	Providing and fixing C.P chain with rubber plug.				
a)	1.25" (30 mm) dia.	Each	102.72	642.72	
b)	1.5" (40 mm) dia.	Each	102.72	642.72	
23-56	Providing and fixing P.V.C. waste pipe				
a)	1.25" (30 mm) dia.	Each	102.72	234.72	
b)	1.5" (40 mm) dia.	Each	102.72	300.72	
23-57	Providing and fixing P.V.C. waste flushing bend.				
a)	1.25" (30 mm) dia.	Each	102.72	141.12	
b)	1.5" (40 mm) dia.	Each	102.72	150.72	
23-58	Providing and fixing angle iron brackets for wash hand basin, cistern and sinks.	Each	128.40	608.40	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
23-59	Providing and fixing 1/2" (12 mm) dia. connection pipe including check nuts.				
a)	Plastic rubber connection pipe	Each	102.72	762.72	
b)	Copper connection pipe	Each	102.72	426.72	
23-60	Providing and fixing brass ball valve with unsoldered copper ball.				
a)	1/2" (12 mm) dia.	Each	102.72	798.72	
b)	3/4" (20 mm) dia.	Each	128.40	1088.40	
c)	1" (25 mm) dia.	Each	256.80	1636.80	
d)	1.25" (30 mm) dia.	Each	385.20	1885.20	
e)	1.5" (40 mm) dia.	Each	385.20	2065.20	
f)	2" (50 mm) dia.	Each	674.40	2594.40	
23-61	Providing chambers 9" x 6" x 24" for stop cocks and valves etc. with 4-1/2" (115mm) thick burnt brick masonry walls in 1:6 cement sand mortar, 6" thick cement concrete 1:4:8 in foundation, 1/2" thick plaster in 1:3 cement sand mortar to all inner wall surfaces, 1" thick concrete 1:2:4 flooring complete with C.I. hinged cover and frame 9" x 6" weighing 6.35 kg fixed in 1:2:4 concrete including curing, excavation, back filling and disposal of earth.	Each	832.20	6262.23	
23-62	Providing chambers 15" x 9" x 24" for house meters with 4-1/2" thick burnt brick masonry walls in 1:6 cement sand mortar, 6" thick cement concrete 1:4:8 in foundation, 1/2" thick plaster in 1:3 cement sand mortar to all inner wall surfaces, 1" thick concrete 1:2:4 flooring complete with cast iron hinged cover and frame 15" x 9" weighing 12.7 kg fixed in 1:2:4 concrete including curing, excavation, back filling and disposal of earth.	Each	1084.87	8767.23	
23-63 a)	Providing chambers 30" x 18" x 56" as per approved design for sluice valve 3" to 12" dia. with 18" dia. C.I. cover and frame weighing 88.9 Kg. fixed in 4" thick R.C.C. 1:2:4 slab with re-steel 5 lbs./cu.ft and 9" thick burnt brick masonry walls in 1:6 cement sand mortar, 6" thick cement concrete 1:3:6 in foundation, 1" thick concrete 1:2:4 flooring, 1/2" thick plaster in 1:3 cement sand mortar to all inner wall surfaces, including providing anf fixing C.I. foot rest at every 12" beyond 30" depth including curing, excavation, back filling and disposal of surplus earth.	Each	5421.05	68816.20	
b)	Extra for depth beyond 54" (1.37m) including cost of C.I.foot rest for every 12"(300mm) depth (for depth less than 54" (1.37m) deduct at the same rate).	Per cm.	32.03	217.16	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
23-64 a)	Providing chambers 42" x 42" x 7'-0" as per approved design for sluice valve 15" to 24" dia. with 24" dia. C.I. cover and frame weighing 127 Kg. fixed in 6" thick R.C.C. 1:2:4 slab with re-steel 5 lbs./cu.ft and 9" thick burnt brick masonry walls in 1:6 cement sand mortar, 6" thick cement concrete 1:3:6 in foundation, 1" thick concrete 1:2:4 flooring, 1/2" thick plaster in 1:3 cement sand mortar to all inner wall surfaces, including providing & fixing C.I foot rest at every 12" beyond 30" depth including curing, excavation, back filling and disposal of surplus earth.	Each	12216.65	138569.35	
b)	Extra for depth beyond 7 ft.(2.14 m) including cost of C.I. foot rest for every 12" (300mm) depth (for depth less than 7 ft (2.14 m) deduct at the same rate).	Per cm.	60.62	363.39	
23-65 a)	Providing chambers 45" x 42" x 8'-0" as per approved design for sluice valve 27" to 30" dia. with 30" dia. Concrete Cover. fixed in 6" thick R.C.C. 1:2:4 slab with re-steel 5 lbs./cu.ft and 9" thick burnt brick masonry walls in 1:6 cement sand mortar, 6" thick cement concrete 1:3:6 in foundation, 1" thick concrete 1:2:4 flooring, 1/2" thick plaster in 1:3 cement sand mortar to all inner wall surfaces, including providing anf fixing C.I. foot rest at every 12" beyond 30" depth including curing, excavation, back filling and disposal of surplus earth.	Each	16997.10	112045.81	
b)	Extra for depth beyond 8 ft (2.44 m) including cost of C.I. foot rest for every 12" (300mm) depth (for depth less than 8 ft (2.44 m) deduct at the same rate).	Each	50.48	362.99	
23-66	Extra for 95 Kg cast Iron Pipe				
a)	Gyser 35 gallons capacity	Each	3081.60	59781.60	
b)	Gyser 50 gallons capacity	Each	3081.60	72381.60	
c)	Gas room heater (ordinary, single burner)	Each	2054.40	6842.40	
d)	Gas room heater (ordinary, double burner)	Each	2054.40	11504.40	
e)	Gas room heater (fancy, single burner)	Each	2054.40	13394.40	
f)	Gas room heater (fancy, Double burner)	Each	2054.40	13394.40	
g)	Gas room heater (fire place design with artificial log or coal, double burner)	Each	3081.60	21981.60	
h)	Gas lamp (single)	Each	1540.80	4375.80	
i)	Gas lamp (double)	Each	1540.80	5005.80	
j)	Instant Gas Gyser 5 Litre capacity	Each	3081.60	18831.60	
k)	Instant Gas Gyser 8 Litre capacity	Each	3081.60	23871.60	
l)	Instant Gas Gyser 10 Litre capacity	Each	3081.60	25761.60	
j)	Instant Gas Gyser 12.5 Litre capacity	Each	3081.60	28281.60	
23-67	Providing and connecting PVC/ Rubber pipe for gas connection	Per point	123.60	855.60	
23-68	Add extra for respective payable item of ground floor				
a)	For first floor	%	10.0%		
b)	For every additional floor above first floor	%	7.5%		

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
23-69	Providing and fixing Complete Bathroom set of Master Common Bath Set with noble hand shower 009/1, 010/3, 025/1, 027B/1, 085/1, 2015/1(3002) including Shower Set, Basin Mixer, bib Cock etc. complete in all respect	Each	4363.20	25963.20	
23-70	Providing and fixing Sonex/Master WC CR Shower including Connecting Flexible Pipe and bib cok including making requisite numbers of holes and making good with approved material.	Each	363.60	3543.60	
23-71	Supply and fix Hot water Boiler 100 Gallon capacity with galvanized sheet 10 Guage thickness with 6.5 ft hight and 2.5 ft Diameter as G.I pipe including Specials				
a)	Water Boiler 100 gallons capacity	Each	4108.80	77188.80	

SECTION – 24

SURFACE DRAINAGE

1. THE RATES INCLUDE CUTTING AND MAKING GOOD OF THE SURFACE OF WALLS, ROOFS, FLOORS, ETC. WHERE NECESSARY

2. ADD 10% EXTRA FOR FIXING SPECIALS IN REPAIR WORK FOR ITEM 23-56

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
24-1	Providing and laying tega formed of first class burnt clay bricks on end laid in 3/8" (9.5mm) joint and over 1/2" (13mm) thick cement sand mortar bedding projecting to a height of not more than 6" (150mm) top of drain along the property side where required laid to line, grade, slope and shape according to the drawings.				
a)	3" (75 mm) thick				
i)	Cement sand mortar 1 : 3	R.M	104.61	328.47	
ii)	Cement sand mortar 1 : 5	R.M	104.61	313.06	
b)	4-1/2" (114 mm) thick				
i)	Cement sand mortar 1 : 3	R.M	155.16	526.85	
ii)	Cement sand mortar 1 : 5	R.M	155.16	363.61	
24-2	Providing and laying first class burnt clay bricks 3" (75 mm) thick laid in 3/8" (9.5mm) joint in cement sand mortar on side of drains and in other works where required. All joints to be completely filled and struck flush.				
a)	Cement sand mortar 1 : 3	Sq.m	500.99	1528.09	
b)	Cement sand mortar 1 : 5	Sq.m	500.99	1470.30	
c)	Cement sand mortar 1 : 6	Sq.m	500.99	1455.09	
24-3	Providing and laying first class burnt clay bricks on edge 4.5" (115mm) thick laid in 3/8" (9.5mm) joint in cement sand mortar on side of drains and on other works where required. All joints to be completely filled and struck flush.				
a)	Cement sand mortar 1 : 3	Sq.m	714.06	2247.23	
b)	Cement sand mortar 1 : 5	Sq.m	714.06	2117.20	
c)	Cement sand mortar 1 : 6	Sq.m	714.06	2082.98	
24-4	Providing and laying first class burnt brick masonry including raking out joints and curing in base (foundation) of surface drains in 3/8" (9.5mm) joints of required thickness.				
a)	Cement sand mortar 1 : 3	Cu.m	479.84	14970.07	
b)	Cement sand mortar 1 : 5	Cu.m	479.84	13907.04	
c)	Cement sand mortar 1 : 6	Cu.m	479.84	13627.30	
24-5	Providing and laying cement concrete using 3/4" (19mm) and down gauge crushed aggregate in base (foundation) of flat or semi circular surface drain of required thickness cast in panels not exceeding 24 sq.in (60 sq.cm) including curing, but excluding the cost of reinforcement and expansion joints.				
a)	1 : 2 : 4	Cu.m	3242.61	18362.03	
b)	1 : 3 : 6	Cu.m	3242.61	15802.03	
c)	1 : 4 : 8	Cu.m	3242.61	13202.15	
24-6	Providing and laying first class burnt brick masonry including surface preparation, raking out joints and curing of surface preparation, raking out joints and curing of surface drains in 3/8" (9.5 mm) joints of required thickness.				
a)	Cement sand mortar 1 : 3	Cu.m	5431.05	19321.06	
b)	Cement sand mortar 1 : 5	Cu.m	5431.05	18170.48	
c)	Cement sand mortar 1 : 6	Cu.m	5431.05	17867.69	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
24-7	Providing and laying first class burnt flat bricks 3" (75mm) thick laid in 3/8" (9.5mm) joint in Herring bond pitching in cement sand mortar laid to lines, grades, shapes and slopes as per drawings.				
a)	Cement sand mortar 1 : 3	Sq.m	426.14	1453.24	
b)	Cement sand mortar 1 : 5	Sq.m	426.14	1395.44	
c)	Cement sand mortar 1 : 6	Sq.m	426.14	1380.24	
24-8	Providing and laying first class burnt brick on edge 4.5" (115mm) thick laid in 3/8" (9.5mm) joint in herring bond pitching in cement sand mortar laid to lines, grades, shapes and slopes as per drawings.				
a)	Cement sand mortar 1 : 3	Sq.m	625.38	2158.55	
b)	Cement sand mortar 1 : 5	Sq.m	625.38	2028.52	
c)	Cement sand mortar 1 : 6	Sq.m	625.38	1994.30	
24-9	Providing and laying 4" (100 mm) thick cement concrete block masonry using crushed aggregate 3/4" (19mm) and down gauge including surface preparation raking out joints and curing for surface drains in 1/2" (12.7mm) thick joints of required thickness.				
a)	1 : 4 : 8				
i)	Cement sand mortar 1 : 4	Cu.m	5741.69	15826.20	
ii)	Cement sand mortar 1 : 5	Cu.m	5741.69	15582.60	
iii)	Cement sand mortar 1 : 6	Cu.m	5741.69	15408.60	
b)	1 : 3 : 6				
i)	Cement sand mortar 1 : 3	Cu.m	5741.69	18510.49	
ii)	Cement sand mortar 1 : 5	Cu.m	5741.69	18092.89	
iii)	Cement sand mortar 1 : 6	Cu.m	5741.69	17849.29	
24-10	Providing, dressing and laying uncoursed rubble masonry in foundation and sides of drains of required thickness including curing.				
a)	Cement sand mortar 1 : 3	Cu.m	4504.50	15555.55	
b)	Cement sand mortar 1 : 4	Cu.m	4504.50	13860.09	
c)	Cement sand mortar 1 : 6	Cu.m	4504.50	12164.63	
24-11	Providing and laying cement concrete using 3/4" (19mm) and down gauge crushed aggregate in base (foundation) flat or semi circular and sides of open surface drains of required thickness cast in panels not exceeding 24" (60cm) without using forms including curing but excluding the cost of reinforcement and expansion joints.				
a)	1 : 2 : 4	Cu.m	3242.61	17175.85	
b)	1 : 3 : 6	Cu.m	3242.61	11582.69	
c)	1 : 4 : 8	Cu.m	3242.61	9195.53	
24-12	Laying R.C.C pipes in position provided by the Department including jointing.				
a)	6" to 12" (150mm to 300mm)	R.M	674.40	843.00	
b)	Above 12" to 24" (300mm to 600mm)	R.M	1011.60	1264.50	
c)	Above 24" to 36" (600mm to 900mm)	R.M	1348.80	1686.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
24-13	Construct drain comprising P.C.C. 1:2:4 with 1:4:8 P.C.C. bedding laid in lines, grades, slopes and shapes rendering exposed surface of concrete with 3/8" (6mm) thick 1:2 cement sand mortar in accordance with Punjab Standard Drains and as directed by the Engineer Incharge (Excavation shall be paid seperately)				
a)	Type IV	R.M	1067.65	3471.96	
b)	Type V	R.M	1407.80	4734.59	
c)	Type VI	R.M	1620.91	5390.84	
d)	Type VII	R.M	1795.98	5919.41	
e)	Type VIII	R.M	2006.23	6582.70	

SECTION – 25

SEWERAGE

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS

2. EXCAVATION AND BACK-FILLING FOR FOUNDATION AND TRENCHES SHALL BE PAID FOR SEPARATELY

3. DEPTH OF CHAMBER SHALL BE MEASURED VERTICALLY FROM TOP OF CAST IRON COVER TO TOP SURFACE OF FLOORING

4. IF SPECIFICATIONS OF MANHOLES MENTIONED IN ITEM NO 25-5 TO 25-9 ARE NOT MET THEN PAYMENT SHALL BE MADE FOR DIFFERENT ITEMS FROM OTHER SECTIONS OF THIS SCHEDULE

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
25-1	Providing and laying cement concrete pipes moulded with cement concrete 1:1.5:3 with spigot socket or collar joint as specified in trenches to correct alignment and grade, jointing with jointing materials including cutting pipes where necessary, finishing and testing.				
a)	Plain cement concrete pipe conforming to ASTM C-14 class-II or equivalent.				
i)	4" (100 mm) inner dia.	R.M	213.60	577.74	
ii)	6" (150 mm) inner dia.	R.M	230.40	804.96	
iii)	9" (225 mm) inner dia.	R.M	322.56	1314.18	
b)	R.C.C pipe with bell & spigot or tongued & grooved joint conforming to ASTM C-76 class II wall B or BS 3911 Part I class M including cost of reinforcement.				
i)	9" 225 mm inner dia.	R.M	322.56	1645.56	
ii)	12" (300 mm) inner dia.	R.M	691.20	3005.82	
iii)	15" (375 mm) inner dia.	R.M	691.20	3873.96	
iv)	18" (450 mm) inner dia.	R.M	806.40	5145.84	
v)	21" (525 mm) inner dia.	R.M	1036.80	5996.16	
vi)	24" (600 mm) inner dia.	R.M	1152.00	6566.22	
vii)	27" (675 mm) inner dia.	R.M	1612.80	11365.20	
viii)	30" (750 mm) inner dia.	R.M	1843.20	15481.44	
ix)	33" (825 mm) inner dia.	R.M	2106.24	16864.62	
x)	36" (900 mm) inner dia.	R.M	2764.80	19502.64	
xi)	42" (1050 mm) inner dia.	R.M	3686.40	22903.92	
xii)	48" (1200 mm) inner dia.	R.M	5956.80	28026.96	
xiii)	54" (1350 mm) inner dia.	R.M	8294.40	40035.06	
xiv)	60" (1500 mm) inner dia.	R.M	11163.02	47779.88	
xv)	66" (1650 mm) inner dia.	R.M	16588.80	52296.19	
xvi)	72" (1800 mm) inner dia.	R.M	22118.40	82870.56	
25-2	Providing and fixing gulley trap with 4" (100mm) outlet, complete with 4" (100mm) thick 1:2:4 cement concrete using 3/4" (19mm) crushed aggregate for bed and kerb, 1/2" (13mm) thick cement plaster 1:3, 12"x12"x18" deep inside dimension chamber with C.I. grating 6"x6" cover and frame 12"x12".				
a)	Cement concrete gulley trap 6" x 6" x 4" (150 x 150 x 100 mm) with C.I. cover and frame weighing not less than 10 kg.	Each	3888.64	11391.09	
b)	C.I. Gulley trap 6" x 6" x 4" weighing not less than 20 kg	Each	3888.64	11631.09	
c)	Cement concrete gulley trap 6" x 6" x 4" with 2" (50 mm) thick RCC cover and C.I. frame weighing not less than 4 kg.	Each	3888.64	9220.29	
d)	C.I. gulley trap 6" x 6" x 4" with 2" (50 mm) thick RCC cover and C.I. frame weighing not less than 4 kg.	Each	3888.64	9460.29	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
25-3-1	Constructing gulley grating chamber size 36" x 30" (inner dimensions) and 30" deep with glazed earthen ware trap and C.I grating 36" x 30" fixed in 6" thick RCC 1:2:4 slab with (5 lbs. per Cu.ft or 80.09 kg/cu.m steel) with 9" (225mm) burnt brick masonry walls set in 1:6 cement sand mortar, 6" (150 mm) thick 1:3:6 cement concrete in foundation, 1" (25 mm) thick 1:2:4 cement concrete flooring and 1/2" (13mm) thick 1:3 cement plaster to all inside wall surfaces including curing but excluding the cost of excavation, back filling and disposal of excavated stuff.	Each	5599.74	37642.32	
25-4 a)	Providing manhole type 'A' size 24" x 18" (inside dimensions) as per approved design and specifications complete for 4" to 12" dia pipes upto 4 ft. (1.2 m) depth with 16" dia.Concrete Cover fixed in 4" thick RCC 1:2:4 slab (with 5 lbs per Cu.ft. or 80 kg/Cu.m of steel), burnt brick masonry walls 9" (225 mm) thick set in 1:3 cement sand mortar, 6" thick 1:3:6 cement concrete in foundation, 4" av. thickness 1:2:4 cement concrete in benching and 1/2" (13mm) thick cement sand plaster in 1:3 to all inside wall surfaces, channels and benching including making requisite number of main and branch channels but excluding the cost of excavation, back filling and disposal of excavated stuff.	Each	2958.62	18838.36	
b)	Extra for depth beyond 24" (600 m) and upto 48" (1.2 m) for 'A' type manholes	Cm	101.70	220.16	
25-5 a)	Providing manhole type 'B' size 36" x 30" (inside dimensions) x 48" deep as per approved design and specifications complete for 4" to 12" dia. pipe 4ft to 7'-6" depth with 18" dia (inside) Concrete Cover fixed in 6" thick RCC 1:2:4 slab with 5 lbs. per Cu.ft steel and brick masonry walls set in 1:3 cement sand mortar,6" thick 1:3:6 cement concrete foundation, 4" av. thick 1:2:4 cement concrete in benching and 1/2" (13mm) thick cement plaster in 1:3 cement sand mortar, to all inner wall surfaces, channels and benching including providing and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff.	Each	5682.49	33899.13	
b)	Extra for depth beyond 4' (1.2 m) and upto 7'-6" (2.2 m) for 'B' type manholes including cost of cast iron foot rest at every 12" (300mm) of depth	Cm	43.99	202.67	
c)	Extra for using C.I. cover and frame 18" dia. inside and weighing 89 kg for main roads.	Each		34296.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
25-6 a)	Providing manhole type 'C' size 36" x 30" (inside dimensions) x 7.5 ft deep as per approved design and specifications complete for 4" to 12" dia. pipe 7'-6" to 12 ft depth with 18" dia (inside) Concrete Cover fixed in 6" thick RCC 1:2:4 slab with 5 lbs per Cu.ft steel and brick masonry walls set in 1:3 cement sand mortar,6" thick 1:3:6 cement concrete foundation, 4" av. thick 1:2:4 cement concrete in benching and 1/2" (13 mm) thick cement plaster in 1:3 cement sand mortar, to all inner wall surfaces, channels and benching including providing and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff.	Cu.m	12937.13	65912.67	
b)	Extra for depth beyond 7'-6" upto 12 ft (2.2 m to 3.66 m) for 'C' type manholes including cost of cast iron foot rest at every 12" (300mm) of depth	Cm	43.99	202.67	
25-7 a)	Providing manhole type 'D' size 4'-6" x 3' at bottom and 3' x 2' at top (inside dimensions at both level) x 13.5 ft deep as per approved design and specifications complete for 6" to 15" dia. pipe deeper than 12' upto 20 ft depth with 20" dia (inside) C.I. cover and frame (Wt. = 101.6 kg) fixed in 6" thick RCC 1:2:4 slab and 7" thick RCC slab and lintel for supporting 9" thick brick masonry upto 7'-6" depth from top and 18" thick masonry 6' including lintel (height from bottom) set in 1:3 cement sand mortar, 9" thick 1:3:6 cement concrete in foundation, 1:2:4 cement concrete in benching and 1/2" (13mm) thick cement plaster in 1:3 cement sand mortar, to all inner wall surfaces, channels and benching including providing and fixing C.I. foot rest at every 12" of depth and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff. The reinforcement for RCC shall be used at 5 lbs. per Cu.ft of concrete.	Each	35626.61	189197.10	
b)	Extra for 18" thick masonry beyond 13'-6" upto 20 ft (4.1 m to 6.1 m) for 'D' type manholes including cost of extra foot rest at every 12" (300 mm) of depth	Cm	124.17	585.17	
c)	Deduct for lesser depth than 13'-6"(4.1 m) for 'D' type manholes effecting 9" thick masonry, plastering and C.I. foot rest.	Cm	44.85	196.47	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
25-8 a)	Providing manhole type 'E' size 4'-6"x4' at bottom and 3'x2' at top (inside dimensions at both level) x 14.5 ft deep as per approved design and specifications complete for 18" to 24" dia. pipe deeper than 12' upto 20 ft depth with 20" dia (inside) Concrete cover 20 '' with frame fixed in 6" thick RCC 1:2:4 slab and 9" thick RCC slab and lintel for supporting 9" thick brick masonry upto 7'-6" depth from top and 18" thick masonry 7' including lintel (height from bottom) set in 1:3 cement sand mortar, 9" thick 1:3:6 cement concrete in foundation, 1:2:4 cement concrete in benching and 1/2" (13mm) thick cement plaster in 1:3 cement sand mortar, to all inner wall surfaces, channels and benching including providing and fixing C.I. foot rest at every 12" of depth and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff. The reinforcement for RCC shall be used at 5 lbs. per Cu.ft of concrete.	Each	41882.91	223298.29	
b)	Extra for 18" thick masonry required for extra depth beyond 14'- 6" upto 20 ft (4.42m to 6.1m) for 'E' type manholes including cost of extra foot rest at every 12" (300mm) of depth	Cm	137.31	645.23	
c)	Deduct for lesser depth than 14'-6" (4.42 m) for 'E' type manholes effecting 9" thick masonry, plastering and C.I. foot rest.	Cm	44.85	196.47	
25-9-1	Mixing and finishing 1:2:4 concrete benching for floor work in manhole chamber with 1/8" (3 mm) thick cement finish.	Sq.m	616.32	793.57	
25-10-1	Restoration of brick pavement laid dry on edge and joint filled with sand laid over service line with 2" (50 mm) sand cushion underneath.	Sq.m	255.78	933.20	
25-11	Restoration of flat brick pavement laid dry and joint filled with sand laid on service line with 2" (50 mm) sand cushion underneath.	Sq.m	350.40	614.94	
25-12	Providing and fixing step iron or foot rest in manhole chambers including setting to correct lines and levels.				
a)	Angle iron 1.25" x 1.25" x 3/16" (32 mm x 32 mm x 5 mm)	Each	181.80	891.83	
b)	C.I. foot rest	Each	181.80	294.27	
25-13-1	Fixing manhole frame and cover in R.C.C. slab including carriage and cost of fixing material.	Each	642.00	866.70	
25-14-1	Providing and fixing 22" dia. manhole cover in 3" (75 mm) thick RCC 1:2:4, with steel at 5 lbs per cu.ft of concrete with tee shaped C.I. frame of 20" clear inner dia. frame weighing 37.5 kg. including cost of fixing material.	Each	1284.00	16055.28	
25-15-1	Providing and fixing 22 " dia. manhole cover in 6" (150 mm) thick RCC 1:2:4 slab with 5 lbs per Cu.ft steel with tee shaped C.I. frame of 20" (500mm) clear inner dia. frame weighing 37.50 kg. including cost of fixing material.	Each	1540.80	17141.74	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
25-16-1	Providing and fixing 22 " (550 mm) dia. manhole cover in 6" (150mm) thick RCC 1:2:4 slab with 5 lbs per Cu.ft steel with 3" x 3" x 3/8" angle iron frame of 20" (500mm) clear inner dia. weighing 15.5 kg. including cost of fixing material.	Cu.m	2193.00	8331.16	
25-17-1	Desilting of disposal work collecting tank, including removal of sludge upto 300ft (90m)	Cu.m	427.20	592.20	
25-18	Providing and fixing C.I. ventilating shaft with all specials required such as sockets, flanges, radial tees including cost of painting two coats of white zinc paint with pigment of approved shade, excavation. Concrete work shall be paid for separately.				
a)	6" (150 mm) inner dia.				
i)	18 ft. (5.5 m.) long	Kg.	8.06	140.06	
ii)	24 ft. (7.3 m.) long	Kg.	9.22	141.22	
iii)	30 ft. (9.15 m.) long	Kg.	11.52	143.52	
iv)	36 ft. (11 m.) long	Kg.	13.82	145.82	
b)	9" 225 mm inner dia.				
i)	18 ft. (5.5 m.) long	Kg.	9.22	141.22	
ii)	24 ft. (7.3 m.) long	Kg.	11.52	143.52	
iii)	30 ft. (9.15 m.) long	Kg.	13.82	145.82	
iv)	36 ft. (11 m.) long	Kg.	14.98	146.98	
c)	12" (300 mm) inner dia.				
i)	18 ft. (5.5 m.) long	Kg.	11.52	143.52	
ii)	24 ft. (7.3 m.) long	Kg.	13.82	145.82	
iii)	30 ft. (9.15 m.) long	Kg.	14.98	146.98	
25-19	Clearing of silt in 10 ft (3m.) dia wells and removal of slush outside the compound.				
a)	Upto 10 ft (3 m.) depth of slush	R.M	6012.84		
b)	Beyond 10 ft (3 m.) depth of slush	R.M	7120.00		
25-20	Providing and Installing uPVC pipe IIL, Dadex or equivalent make registered with PSQCA in sewerlines and/or laying, cutting, jointing, testing including all specials in pipe lines in trenches.				
a)	Class B				
i)	3" (75 mm) dia	R.M	67.44	1065.36	
ii)	4" (100 mm) dia	R.M	67.44	1570.66	
iii)	5" (125 mm) dia	R.M	101.16	2185.70	
iv)	6" (150 mm) dia	R.M	101.16	3006.22	
v)	8" (200 mm) dia	R.M	101.16	4492.01	
vi)	10" (250 mm) dia	R.M	134.88	9502.66	
vii)	12" (300 mm) dia	R.M	134.88	13248.82	
viii)	14" (350 mm) dia	R.M	134.88	15887.76	
ix)	16" (400 mm) dia	R.M	202.32	16525.44	
x)	18" (450 mm) dia	R.M	202.32	22695.12	
xi)	20" (500 mm) dia	R.M	202.32	31090.32	
xii)	22" (550 mm) dia	R.M	337.20	36373.20	
xiii)	24" (600 mm) dia	R.M	337.20	43422.00	
b)	Class C				
i)	3" (75 mm) dia	R.M	67.44	1266.53	
ii)	4" (100 mm) dia	R.M	67.44	2030.02	
iii)	5" (125 mm) dia	R.M	101.16	3067.99	
iv)	6" (150 mm) dia	R.M	101.16	4311.43	
v)	8" (200 mm) dia	R.M	101.16	6611.40	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
vi)	10" (250 mm) dia	R.M	134.88	11381.28	
vii)	12" (300 mm) dia	R.M	134.88	14549.28	
viii)	14" (350 mm) dia	R.M	134.88	16291.68	
ix)	16" (400 mm) dia	R.M	202.32	18497.52	
x)	18" (450 mm) dia	R.M	202.32	26734.32	
xi)	20" (500 mm) dia	R.M	202.32	31882.32	
xii)	22" (550 mm) dia	R.M	337.20	38036.40	
xiii)	24" (600 mm) dia	R.M	337.20	45481.20	
c)	Class D				
i)	3" (75 mm) dia	R.M	67.44	1602.34	
ii)	4" (100 mm) dia	R.M	67.44	2638.27	
iii)	6" (150 mm) dia	R.M	101.16	3966.12	
iv)	6" (150 mm) dia	R.M	101.16	5635.66	
v)	8" (200 mm) dia	R.M	101.16	8638.92	
vi)	10" (250 mm) dia	R.M	134.88	12806.88	
vii)	12" (300 mm) dia	R.M	134.88	15658.08	
viii)	14" (350 mm) dia	R.M	134.88	18746.88	
ix)	16" (400 mm) dia	R.M	202.32	23170.32	
x)	18" (450 mm) dia	R.M	202.32	29981.52	
xi)	20" (500 mm) dia	R.M	202.32	36951.12	
xii)	22" (550 mm) dia	R.M	337.20	39937.20	
xiii)	24" (600 mm) dia	R.M	337.20	47461.20	
d)	Class E				
i)	3" (75 mm) dia	R.M	67.44	1966.66	
ii)	4" (100 mm) dia	R.M	67.44	3214.85	
iii)	5" (125 mm) dia	R.M	101.16	4875.34	
iv)	6" (150 mm) dia	R.M	101.16	6899.69	
v)	8" (200 mm) dia	R.M	101.16	10557.14	
vi)	10" (250 mm) dia	R.M	134.88	14707.68	
vii)	12" (300 mm) dia	R.M	134.88	17558.88	
viii)	14" (350 mm) dia	R.M	134.88	19776.48	
ix)	16" (400 mm) dia	R.M	202.32	28080.72	
x)	18" (450 mm) dia	R.M	202.32	34891.92	
xi)	20" (500 mm) dia	R.M	202.32	41148.72	
xii)	22" (550 mm) dia	R.M	337.20	44530.80	
xiii)	24" (600 mm) dia	R.M	337.20	52371.60	
25-21 a)	Providing manhole type 'A' size 24" x 18" (inside dimensions) as per approved design and specifications complete for 4" to 12" dia pipes upto 4 ft. (1.2 m) depth with 16" dia. Concrete cover and frame fixed in 4" thick RCC 1:2:4 slab (with 5 lbs per Cu.ft. or 80 kg/Cu.m of steel), 6" (150 mm) thick 1:2:4 cement concrete, 6" thick 1:3:6 cement concrete in foundation, 4" av. thickness 1:2:4 cement concrete in benching and benching including making requisite number of main and branch channels but excluding the cost of excavation, back filling and disposal of excavated stuff.	Each	1573.32	34884.36	
b)	Extra for depth beyond 24" (600 m) and upto 48" (1.2 m) for 'A' type manholes.	Cm	13.11	107.46	

Sr. No.		Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
				Labour	Composite	
25-22	a)	Providing manhole type 'B' size 36" x 30" (inside dimensions) x 48" deep as per approved design and specifications complete for 4" to 12" dia. pipe 4ft to 7'-6" depth with 18" dia (inside) Concrete cover and frame fixed in 6" thick RCC 1:2:4 slab with 5 lbs. per Cu.ft steel and Concrete walls,6" thick 1:3:6 cement concrete foundation, 4" av. thick 1:2:4 cement concrete in benching to all inner wall surfaces, channels and benching including providing and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff.	Each	2753.31	36705.88	
	b)	Extra for depth beyond 4' (1.2 m) and upto 7'-6" (2.2 m) for 'B' type manholes including cost of cast iron foot rest at every 12" (300mm) of depth	Cu.m	18.73	155.61	
	c)	Extra for using C.I. cover and frame 18" dia. inside and weighing 89 kg for main roads.	Each		34296.00	
25-23	a)	Providing manhole type 'C' size 36" x 30" (inside dimensions) x 7.5 ft deep as per approved design and specifications complete for 4" to 12" dia. pipe 7'-6" to 12 ft depth with 18" dia (inside) Concrete cover fixed in 6" thick RCC 1:2:4 slab with 5 lbs per Cu.ft steel and 6'' thick RCC Walls,6" thick 1:3:6 cement concrete foundation, 4" av. thick 1:2:4 cement concrete and benching including providing and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff.	Each	8132.51	102768.30	
	b)	Extra for depth beyond 7'-6" upto 12 ft (2.2 m to 3.66 m) for 'C' type manholes including cost of cast iron foot rest at every 12" (300mm) of depth	Cm	18.73	155.61	
	c)	Extra for using C.I. cover weighing 89 kg for main roads.	Each		34296.00	
25-24	a)	Providing manhole type 'D' size 4'-6" x 3' at bottom and 3' x 2' at top (inside dimensions at both level) x 13.5 ft deep as per approved design and specifications complete for 6" to 15" dia. pipe deeper than 12' upto 20 ft depth with 20" dia (inside) Concrete cover and frame fixed in 6" thick RCC 1:2:4 slab and 7" thick RCC slab and lintel for supporting 6" thick RCC walls upto 7'-6" depth from top , 9" thick 1:3:6 cement concrete in foundation, 1:2:4 cement concrete in benching to all inner wall surfaces, channels and benching including providing and fixing C.I. foot rest at every 12" of depth and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff. The reinforcement for RCC shall be used at 5 lbs. per Cu.ft of concrete.	Each	10142.30	180255.90	
	b)	Extra for using C.I. cover and frame 18" dia. inside and weighing 101 kg for main roads.	Each			

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
25-25 a)	Providing manhole type 'E' size 4'-6"x4' at bottom and 3'x2' at top (inside dimensions at both level) x 14.5 ft deep as per approved design and specifications complete for 18" to 24" dia. pipe deeper than 12' upto 20 ft depth with 20" dia (inside) Concrete cover and frame fixed in 6" thick RCC 1:2:4 slab and 9" thick RCC slab and 6'' thick Concrete walls, 9" thick 1:3:6 cement concrete in foundation, 1:2:4 cement concrete in benching including providing and fixing C.I. foot rest at every 12" of depth and making requisite number of main and branch channels but excluding the cost of excavation, back filling, disposal of excavated stuff. The reinforcement for RCC shall be used at 5 lbs. per Cu.ft of concrete.	Each	25285.50	451028.79	
b)	Extra for RCC walls required for extra depth beyond 14'-6" upto 20 ft (4.42m to 6.1m) for 'E' type manholes including cost of extra foot rest at every 12" (300mm) of depth	Cm	92.55	1349.88	
c)	Extra for using C.I. cover and frame 20" dia. inside and weighing 101 kg for main roads.	Each		42612.00	

SECTION – 26

SINKING OF WELLS

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS

2. WELL CUBS TO BE LAID AT SPRING LEVEL OR AS DEEP AS POSSIBLE

3. THE OUTER DIMENSIONS OF THE CURB SHALL FORM BASIS OF PAYMENT

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
26-1	Excavation of well in dry and under water level and disposal of soil within 100 ft. (30m or one chain)				
a)	In ordinary soil or sand				
i)	Upto 5 ft. (1.5 m) depth	Cu.m	650.41		
ii)	Above 5 ft. to 10 ft. (1.5 m to 3 m) depth	Cu.m	704.61		
iii)	Above 10 ft. to 15 ft. (3 m to 4.5 m) depth	Cu.m	758.81		
iv)	Above 15 ft. to 20 ft. (4.5 m to 6 m) depth	Cu.m	813.02		
v)	Above 20 ft. to 25 ft. (6 m to 7.5 m) depth	Cu.m	867.22		
vi)	Above 25 ft. to 30 ft. (7.5 m to 9 m) depth	Cu.m	975.62		
vii)	Above 30 ft. to 35 ft. (9 m to 10.5 m) depth	Cu.m	1084.02		
viii)	Above 35 ft. to 40 ft. (10.5 m to 12 m) depth	Cu.m	1192.42		
ix)	Above 40 ft. to 45 ft. (12 m to 13.5 m) depth	Cu.m	1300.82		
x)	Above 45 ft. (13.5 m) to any depth	Cu.m	1734.43		
xi)	Under water upto 15 ft. depth (upto 4.5 m below water level)	Cu.m	2168.04		
b)	In hard soil				
i)	Upto 5 ft. (1.5 m) depth	Cu.m	758.81		
ii)	Above 5 ft. to 10 ft. (1.5 m to 3 m) depth	Cu.m	813.02		
iii)	Above 10 ft. to 15 ft. (3 m to 4.5 m) depth	Cu.m	867.22		
iv)	Above 15 ft. to 20 ft. (4.5 m to 6 m) depth	Cu.m	921.42		
v)	Above 20 ft. to 25 ft. (6 m to 7.5 m) depth	Cu.m	1029.82		
vi)	Above 25 ft. to 30 ft. (7.5 m to 9 m) depth	Cu.m	1138.22		
vii)	Above 30 ft. to 35 ft. (9 m to 10.5 m) depth	Cu.m	1246.62		
viii)	Above 35 ft. to 40 ft. (10.5 m to 12 m) depth	Cu.m	1355.03		
ix)	Above 40 ft. to 45 ft. (12 m to 13.5 m) depth	Cu.m	1463.43		
x)	Above 45 ft. (13.5 m) to any depth	Cu.m	1842.83		
xi)	Under water upto 15 ft. depth (upto 4.5 m below water level)	Cu.m	2384.84		
c)	In hard strata including shingle, gravel or equivalent				
i)	Upto 5 ft. (1.5 m) depth	Cu.m	1409.23		
ii)	Above 5 ft. to 10 ft. (1.5 m to 3 m) depth	Cu.m	1463.43		
iii)	Above 10 ft. to 15 ft. (3 m to 4.5 m) depth	Cu.m	1517.63		
iv)	Above 15 ft. to 20 ft. (4.5 m to 6 m) depth	Cu.m	1571.83		
v)	Above 20 ft. to 25 ft. (6 m to 7.5 m) depth	Cu.m	1680.23		
vi)	Above 25 ft. to 30 ft. (7.5 m to 9 m) depth	Cu.m	1788.63		
vii)	Above 30 ft. to 35 ft. (9 m to 10.5 m) depth	Cu.m	1897.04		
viii)	Above 35 ft. to 40 ft. (10.5 m to 12 m) depth	Cu.m	2005.44		
ix)	Above 40 ft. to 45 ft. (12 m to 13.5 m) depth	Cu.m	2113.84		
x)	Above 45 ft. (13.5 m) to any depth	Cu.m	2276.44		
xi)	Under water upto 15 ft. depth (upto 4.5 m below water level)	Cu.m	2384.84		
26-2	Dry sinking of well including loading and removing of excavated material within 100ft (30m.) lead.				
a)	In ordinary soil or sand				
i)	Above 10 ft. to 15 ft. (3 m to 4.5 m) depth	Cu.m	2384.84		
ii)	Above 15 ft. to 20 ft. (4.5 m to 6 m) depth	Cu.m	3040.68		
iii)	Above 20 ft. to 25 ft. (6 m to 7.5 m) depth	Cu.m	3696.51		
iv)	Above 25 ft. to 30 ft. (7.5 m to 9 m) depth	Cu.m	4352.34		
v)	Above 30 ft. to 35 ft. (9 m to 10.5 m) depth	Cu.m	5008.17		
vi)	Above 35 ft. to 40 ft. (10.5 m to 12 m) depth	Cu.m	5664.00		
vii)	Above 40 ft. to 45 ft. (12 m to 13.5 m) depth	Cu.m	6319.84		
viii)	Above 45 ft. (13.5 m) to any depth	Cu.m	6975.67		
b)	In hard soil				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
i)	Above 10 ft. to 15 ft. (3 m to 4.5 m) depth	Cu.m	3338.78		
ii)	Above 15 ft. to 20 ft. (4.5 m to 6 m) depth	Cu.m	3994.61		
iii)	Above 20 ft. to 25 ft. (6 m to 7.5 m) depth	Cu.m	4650.45		
iv)	Above 25 ft. to 30 ft. (7.5 m to 9 m) depth	Cu.m	5306.28		
v)	Above 30 ft. to 35 ft. (9 m to 10.5 m) depth	Cu.m	5962.11		
vi)	Above 35 ft. to 40 ft. (10.5 m to 12 m) depth	Cu.m	6617.94		
vii)	Above 40 ft. to 45 ft. (12 m to 13.5 m) depth	Cu.m	7273.77		
viii)	Above 45 ft. (13.5 m) to any depth	Cu.m	7929.61		
c)	In hard strata including shingle, gravel or equivalent				
i)	Above 10 ft. to 15 ft. (3 m to 4.5 m) depth	Cu.m	4650.45		
ii)	Above 15 ft. to 20 ft. (4.5 m to 6 m) depth	Cu.m	5306.28		
iii)	Above 20 ft. to 25 ft. (6 m to 7.5 m) depth	Cu.m	5962.11		
iv)	Above 25 ft. to 30 ft. (7.5 m to 9 m) depth	Cu.m	6617.94		
v)	Above 30 ft. to 35 ft. (9 m to 10.5 m) depth	Cu.m	7273.77		
vi)	Above 35 ft. to 40 ft. (10.5 m to 12 m) depth	Cu.m	7929.61		
vii)	Above 40 ft. to 45 ft. (12 m to 13.5 m) depth	Cu.m	8585.44		
viii)	Above 45 ft. (13.5 m) to any depth	Cu.m	9241.27		
26-3	Wet sinking of well in ordinary soil (value of 'c' upto 5) for depth below spring level including charges of machinery, shoring, kentledge and removal of excavated material within 100 ft. (30m.) lead.				
i)	Upto 10 ft (3 m) depth	Cu.m	1186.20	3250.44	
ii)	Above 10 ft. to 20 ft. (3 m to 6 m) depth	Cu.m	2668.95	7313.49	
iii)	Above 20 ft. to 30 ft. (6 m to 9 m) depth	Cu.m	3558.60	9751.32	
iv)	Above 30 ft. to 40 ft. (9 m to 12 m) depth	Cu.m	4151.70	11376.54	
v)	Above 40 ft. to 50 ft. (12 m to 15 m) depth	Cu.m	4448.25	12189.15	
vi)	Above 50 ft. to 60 ft. (15 m to 18 m) depth	Cu.m	4744.80	13001.76	
vii)	Above 60 ft. to 70 ft. (18 m to 21 m) depth	Cu.m	5041.35	13814.37	
viii)	Above 70 ft. to 80 ft. (21 m to 24 m) depth	Cu.m	5337.90	14626.98	
ix)	Above 80 ft. (24 m) to any depth	Cu.m	5634.45	15439.59	
26-4	Wet sinking of well in cohesive soil (value of 'C' more than 5) for depth below spring level including charges of machinery, shoring, kentledge and removal of excavated material within 30m lead.				
i)	Upto 10 ft (3 m) depth	Cu.m	1779.30	4875.66	
ii)	Above 10 ft. to 20 ft. (3 m to 6 m) depth	Cu.m	4003.43	10970.24	
iii)	Above 20 ft. to 30 ft. (6 m to 9 m) depth	Cu.m	5337.90	14626.98	
iv)	Above 30 ft. to 40 ft. (9 m to 12 m) depth	Cu.m	6227.55	17064.81	
v)	Above 40 ft. to 50 ft. (12 m to 15 m) depth	Cu.m	6672.38	18283.73	
vi)	Above 50 ft. to 60 ft. (15 m to 18 m) depth	Cu.m	7117.20	19502.64	
vii)	Above 60 ft. to 70 ft. (18 m to 21 m) depth	Cu.m	7562.03	20721.56	
viii)	Above 70 ft. to 80 ft. (21 m to 24 m) depth	Cu.m	8006.85	21940.47	
ix)	Above 80 ft. (24 m) to any depth	Cu.m	8451.68	23159.39	
26-5	Wet sinking of well in shingle or gravel for depth below spring level including charges for machinery, shoring, kentledge and removal of excavated material within 100 ft. (30 m.) lead.				
i)	Upto 10 ft (3 m) depth	Cu.m	2372.40	6500.88	
ii)	Above 10 ft. to 20 ft. (3 m to 6 m) depth	Cu.m	5337.90	14626.98	
iii)	Above 20 ft. to 30 ft. (6 m to 9 m) depth	Cu.m	7117.20	19502.64	
iv)	Above 30 ft. to 40 ft. (9 m to 12 m) depth	Cu.m	8303.40	22753.08	
v)	Above 40 ft. to 50 ft. (12 m to 15 m) depth	Cu.m	8896.50	24378.30	
vi)	Above 50 ft. to 60 ft. (15 m to 18 m) depth	Cu.m	9489.60	26003.52	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
vii)	Above 60 ft. to 70 ft. (18 m to 21 m) depth	Cu.m	10082.70	27628.74	
viii)	Above 70 ft. to 80 ft. (21 m to 24 m) depth	Cu.m	10675.80	29253.96	
ix)	Above 80 ft. (24 m) to any depth	Cu.m	11268.90	30879.18	
26-6	Making and supplying at site of work Kikar or Chalghoza wood well curb.	Cu.m	61632.00	162991.00	
26-7	Laying well curb in position only.	Each Job	1284.00		
26-8	Providing, making and laying R.C.C. well curb in position using 3/4" (19mm) and down gauge crushed aggregate and coarse sand including formwork, moulds, shuttering, rendering the exposed surface including curing. The reinforcement will be paid separately.				
a)	1 : 1.5 : 3	Cu.m	4907.64	20557.71	
b)	1 : 2 : 4	Cu.m	4907.64	16721.92	
26-9	Providing and fixing structural steel for cutting edge.	% kg	3417.60	26856.90	
26-10	Making and removing false masonry on well including its dismantling and cost of scraping bricks.	Cu.m	4180.06	13954.66	

SECTION – 27

TUBE WELL AND WATER SUPPLY

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS

2. CAST IRON PIPES AND FITTINGS SHALL COMPLY WITH B.S. 78 FOR SPIGCT AND SOCKET, VERTICALLY CAST IRON PIPES AND B.S. 2035 FOR FLANGED PIPES

3. PVC PIPES AND FITTINGS SHALL COMPLY WITH B.S. 3505 ASBESTOS CEMENT PIPE AND FITTING SHALL COMPLY WITH B.S. 486 GALVANIZED IRON PIPES AND FITTINGS SHALL CONFORM TO B.S. 1387-1967 SECTION

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
27-1-a	Drilling of bore for tube well including reaming of borehole by Percussion drilling in all types of soil except shingle, gravel and rock from ground Level upto 1200ft depth including sinking and withdrawing casing pipe & disposal of excavated material within 100ft (30m) 9" to 12" inner dia	R.M	2037.50	6802.89	
b)	Drilling of bore for tube well including reaming of borehole by Percussion drilling in shingle,gravel and boulder from ground Level upto 1200ft depth including sinking and withdrawing casing pipe & disposal of excavated material within 100ft (30m) 9" to 12" inner dia	R.M	2387.91	9325.77	
c)	Drilling of bore for tube well including reaming of borehole by Percussion drilling in Hard Rock from ground Level upto 1200ft depth including sinking and withdrawing casing pipe & disposal of excavated material within 100ft (30m) 9" to 12" inner dia	R.M	2913.53	13208.52	
27-2-a	Drilling of bore for tube well including reaming of borehole by Rotary Rig in all types of soil except shingle, gravel and rock from ground Level upto 1400ft depth including sinking and withdrawing casing pipe & disposal of excavated material within 100ft (30m) 10" to 24" inner dia	R.M	1943.12	5967.32	
b)	Drilling of bore for tube well including reaming of borehole by Rotary Rig in shingle,gravel and boulder from ground Level upto 1400ft depth including sinking and withdrawing casing pipe & disposal of excavated material within 100ft (30m) 10" to 24" inner dia	R.M	1845.48	8391.46	
c)	Drilling of bore for tube well including reaming of borehole by Rotary Rig in Hard Rock with Foam Drilling from ground Level upto 1400ft depth including sinking and withdrawing casing pipe & disposal of excavated material within 100ft (30m) 10" to 12" inner dia	R.M	5019.93	19399.95	
27-3-a	Drilling of bore for tube well including reaming of borehole by Air drilling in shingle,gravel and boulder from ground Level upto 1000ft depth including sinking and withdrawing casing pipe & disposal of excavated material within 100ft (30m) 8" to 12" inner dia	R.M	2917.47	6838.32	
b)	Drilling of bore for tube well including reaming of borehole by Air drilling in Hard Rock from ground Level upto 1000ft depth including sinking and withdrawing casing pipe & disposal of excavated material within 100ft (30m) 8" to 12" inner dia	R.M	4789.60	8710.46	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
27-4	Drilling of bore for tube well including reaming of borehole by Foam drilling in shingle,gravel and boulder from ground Level upto 1200ft depth including sinking and withdrawing casing pipe & disposal of excavated material within 100ft (30m) 10" to 12" inner dia	R.M	4143.90	15423.38	
27-5	Drilling of bore for pilling in all types of soil except shingle, gravel and rock.				
a)	From ground level upto 250 ft. (75 m) below ground level				
i)	(370 mm to 450 mm) i/d 15"-18" Reaming of Test Hole	R.M	1250.64	8948.53	
ii)	(500 mm to 700 mm) i/d 20"-28" Reaming of Test Hole	R.M		9843.38	
b)	Exceeding 250 ft (75 m.) depth below ground level				
i)	(370 mm to 450 mm) i/d 15"-18" Reaming of Test Hole	R.M		11633.09	
ii)	(500 mm to 700 mm) i/d 20"-28" Reaming of Test Hole	R.M		12796.40	
27-6	Drilling for boring/Pilling in shingle, gravel				
a)	From ground level upto 250 ft. (75 m) below ground level				
i)	(370 mm to 450 mm) i/d	R.M		13422.79	
ii)	(500 mm to 700 mm) i/d	R.M		14765.07	
b)	Exceeding 250 ft (75 m.) depth below ground level				
i)	(370 mm to 450 mm) i/d	R.M		17449.63	
ii)	(500 mm to 700 mm) i/d	R.M		19194.60	
27-7	Drilling of boring/pilling in all types of soil except shingle, gravel and rock.				
a)	From ground level upto 250 ft. (75 m) below ground level				
i)	15" to 18" (375 mm to 450 mm) inner dia.	R.M		14196.23	
ii)	20" to 30" (500 mm to 750 mm) inner dia.	R.M		15615.85	
b)	Exceeding 250 ft (75 m.) depth below ground level				
i)	15" to 18" (375 mm to 450 mm) inner dia.	R.M		18455.09	
ii)	20" to 30" (500 mm to 750 mm) inner dia.	R.M		20300.60	
27-8	Drilling for boring/Pilling in shingle, gravel				
a)	From ground level upto 250 ft. (75 m) below ground level				
i)	15" to 18" (375 mm to 450 mm) inner dia.	R.M		21294.34	
ii)	20" to 30" (500 mm to 750 mm) inner dia.	R.M		23423.77	
b)	Exceeding 250 ft (75 m.) depth below ground level				
i)	15" to 18" (375 mm to 450 mm) inner dia.	R.M		27682.64	
ii)	20" to 30" (500 mm to 750 mm) inner dia.	R.M		30450.90	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
27-9	Providing box 48"x 30"x 9" (1.2m x 0.75m x 0.23m) of deodar wood planks with compartment 4" x 4" (100mm x 100mm) including locking arrangement for preserving strata samples from borehole and painted with two coats of paint. The top and bottom of the box to be of 1/2" (12mm) planks, sides and compartments to be of 1/4" (6mm) planks.	Each	2634.00	103162.70	
27-10	Resistivity survey, Logging of bore hole and furnishing sample of water,				
a)	Furnishing sample of water from bore hole.	Job	432.00	14250.00	
b)	Electrical Resistivity survey from approved hydrogeologist upto 3 trails complete in all respect.	Job	6408.00	61128.00	
c)	Logging of bore from Certified Geologist including the design of Bore and strata chart with water sample test report complete in all respect.	Job	3844.80	39244.80	
27-11	Providing and installing MS strainer in tubewell bore hole including specials, sockets and studs of the nominal inner diameter.				
a)	2" (50 mm) dia. and (3 mm) wall thickness	R.M	266.59	1273.94	
b)	3" (75 mm) dia. and (3 mm) wall thickness	R.M	266.59	1849.22	
c)	4" (100 mm) dia. And (3 mm) wall thickness	R.M	266.59	2375.54	
d)	5" (125 mm) dia. and (3 mm) wall thickness	R.M	266.59	3335.16	
e)	6" (150 mm) dia. and 3 mm) wall thickness	R.M	266.59	3954.50	
f)	7" (175 mm) dia and (3 mm) thick	R.M	266.59	4581.19	
g-1)	8" (200 mm) dia and (3 mm) thick	R.M	266.59	4581.19	
g-2)	8" (200 mm) dia and (3.5 mm) thick	R.M	266.59	5204.21	
h)	9" (225 mm) dia and 3/16" (3 mm) thick	R.M	266.59	5871.29	
i-1)	10" (250 mm) dia. and 3 mm wall thick	R.M	266.59	6202.99	
i-2)	10" (250 mm) dia. and 3.5 mm wall thick	R.M	266.59	6499.20	
i-3)	10" (250 mm) dia. and 4 mm wall thick	R.M	266.59	7362.12	
i-4)	10" (250 mm) dia. and 4.5 mm wall thick	R.M	266.59	8277.67	
j-1)	12" (300 mm) dia and 4 mm wall thick	R.M	266.59	9764.83	
j-2)	12" (300 mm) dia and 4.5 mm wall thick	R.M	266.59	10670.59	
j-3)	12" (300 mm) dia and 5 mm wall thick	R.M	266.59	11710.99	
j-4)	12" (300 mm) dia and 1/4" (6 mm) thick	R.M	266.59	13730.59	
k)	15" (375 mm) dia and 1/4" (6 mm) thick	R.M	266.59	15566.59	
l)	18" (450 mm) dia and 1/4" (6 mm) thick	R.M	266.59	18198.19	
m)	20" (500 mm) dia and 1/4" (6 mm) thick	R.M	266.59	21074.59	
n)	22" (550 mm) dia and 1/4" (6 mm) thick	R.M	266.59	24134.59	
27-12	Providing and installing M.S. bail plug in tubewell bore hole 1.5 ft. (50cm) long and of the nominal inner diameter				
a)	2" (50 mm) inner dia.	Each	487.10	1465.08	
b)	3" (75 mm) inner dia.	Each	487.10	1870.22	
c)	4" (100 mm) inner dia.	Each	487.10	2919.19	
d)	5" (125 mm) inner dia.	Each	487.10	3667.06	
e)	6" (150 mm) inner dia.	Each	487.10	4444.30	
f)	7" (175 mm) dia	Each	487.10	5187.26	
g)	8" (200 mm) inner dia.	Each	487.10	5627.90	
h)	9" 225 mm inner dia.	Each	487.10	6173.81	
i)	10" (250 mm) inner dia.	Each	487.10	7806.62	
j)	12" (300 mm) inner dia.	Each	487.10	9269.30	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
27-13	Providing and installing fibre glass strainer in tubewell bore hole including sockets and solvents.				
a)	8" (200 mm) dia. and 3/16" (5 mm) wall thickness	R.M	292.20	5304.90	
b)	10" (250 mm) dia. and 0.2" to 0.22" (5 mm to 5.5 mm) wall thickness	R.M	292.20	7323.00	
27-14	Providing and installing fibre glass bail/end plug in tubewell bore.				
a)	8" (200 mm) inner dia.	Each	292.20	5867.40	
b)	10" (250 mm) inner dia.	Each	292.20	8897.40	
27-15	Providing and installing fibre glass blank pipe in tubewell bore hole including coupling and jointing with strainer.				
a)	8" (200 mm) dia. and 3/16" (5 mm) wall thickness	R.M	292.20	4914.30	
b)	10" (250 mm) dia. with 3/16" (5 mm) wall thickness	R.M	292.20	6932.40	
c)	14" (350 mm) dia. and 3/16" to 1/4" (5 mm to 6 mm) wall thickness	R.M	292.20	11945.10	
27-16	Providing and installing uPVC strainer in tubewell bore hole including sockets and solvent registered with PSQCA of the nominal inner diameter.				
a)	Class B				
i)	3" (75 mm) inner dia.	R.M	24.38	1101.50	
ii)	4" (100 mm) inner dia.	R.M	24.38	1491.96	
iii)	5" (125 mm) inner dia.	R.M	79.80	1996.58	
iv)	6" (150 mm) inner dia.	R.M	79.80	2630.62	
v)	8" (200 mm) inner dia.	R.M	166.92	3865.85	
vi)	10" (250 mm) inner dia.	R.M	166.92	5185.32	
vii)	12" (300 mm) inner dia.	R.M	315.65	7965.65	
viii)	14" (350 mm) inner dia.	R.M	315.65	8749.01	
b)	Class C				
i)	3" (75 mm) inner dia.	R.M	26.86	602.14	
ii)	4" (100 mm) inner dia.	R.M	26.86	1483.42	
iii)	5" (125 mm) inner dia.	R.M	102.84	2266.87	
iv)	6" (150 mm) inner dia.	R.M	102.84	3285.24	
v)	8" (200 mm) inner dia.	R.M	189.96	5046.79	
vi)	10" (250 mm) inner dia.	R.M	189.96	7476.43	
vii)	12" (300 mm) inner dia.	R.M	287.76	10444.51	
c)	Class D				
i)	1.25" (30 mm) inner dia.	R.M	33.72	364.20	
ii)	1.5" (40 mm) inner dia.	R.M	33.72	572.28	
iii)	2" (50 mm) inner dia.	R.M	26.86	870.19	
iv)	3" (75 mm) inner dia.	R.M	37.54	1529.59	
v)	4" (100 mm) inner dia.	R.M	37.54	2330.09	
vi)	5" (125 mm) inner dia.	R.M	70.80	3363.36	
vii)	6" (150 mm) inner dia.	R.M	70.80	4653.46	
viii)	8" (200 mm) inner dia.	R.M	177.00	6359.42	
ix)	10" (250 mm) inner dia.	R.M	177.00	9759.70	
x)	12" (300 mm) inner dia.	R.M	237.12	13706.02	
d)	Class E				
i)	1.25" (30 mm) inner dia.	R.M	33.72	517.20	
ii)	1.5" (40 mm) inner dia.	R.M	33.72	682.44	
iii)	2" (50 mm) inner dia.	R.M	26.86	689.04	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
iv)	3" (75 mm) inner dia.	R.M	37.54	898.01	
v)	4" (100 mm) inner dia.	R.M	37.54	2311.73	
vi)	5" (125 mm) inner dia.	R.M	70.80	3515.14	
vii)	6" (150 mm) inner dia.	R.M	70.80	5701.20	
viii)	8" (200 mm) inner dia.	R.M	177.00	7861.27	
ix)	10" (250 mm) inner dia.	R.M	177.00	11791.54	
x)	12" (300 mm) inner dia.	R.M	237.12	16488.17	
27-17	Providing and installing uPVC elbow of approved make registered with PSQCA.				
a)	Class B				
i)	3" (75 mm) inner dia.	R.M	101.16	639.72	
ii)	4" (100 mm) inner dia.	R.M	101.16	951.84	
iii)	5" (125 mm) inner dia.	R.M	101.16	1300.68	
iv)	6" (150 mm) inner dia.	R.M	101.16	2365.56	
v)	8" (200 mm) inner dia.	R.M	101.16	6037.56	
vi)	10" (250 mm) inner dia.	R.M	101.16	7934.76	
vii)	12" (300 mm) inner dia.	R.M	101.16	9770.76	
viii)	14" (350 mm) inner dia.	R.M	101.16	11729.16	
c)	Class D				
i)	1.25" (30 mm) inner dia.	R.M	67.44	195.96	
ii)	1.5" (40 mm) inner dia.	R.M	67.44	269.40	
iii)	2" (50 mm) inner dia.	R.M	67.44	326.93	
iv)	3" (75 mm) inner dia.	R.M	67.44	624.36	
v)	4" (100 mm) inner dia.	R.M	67.44	826.32	
vi)	5" (125 mm) inner dia.	R.M	67.44	1511.76	
vii)	6" (150 mm) inner dia.	R.M	67.44	2372.23	
27-18	Providing and installing M.S. blind pipe socketed seemless welded joint or hand welded joint, M.S. reducer where necessary in tubewell bore hole including jointing and welding with strainer of the nominal inner diameter.				
a)	2" (50 mm) dia. and 1/8" (3 mm) wall thickness	R.M	532.49	1777.30	
b)	3" (75 mm) dia. and 1/8" (3 mm) wall thickness	R.M	532.49	2399.09	
c)	4" (100 mm) dia. and 1/8" (3 mm) wall thickness	R.M	665.78	3155.40	
d)	5" (125 mm) dia. and 3/16" (5 mm) wall thickness	R.M	665.78	3837.17	
e)	6" (150 mm) dia. and 3/16" (5 mm) wall thickness	R.M	665.78	4479.77	
f)	8" (200 mm) dia. And (3 mm) wall thickness	R.M	781.20	6963.62	
g)	8" (200 mm) dia. And (3.5 mm) wall thickness	R.M	781.20	7967.30	
h-1)	10" (250 mm) dia. and (3 mm) wall thickness	R.M	925.08	8794.18	
h-2)	10" (250 mm) dia. and (3.5 mm) wall thickness	R.M	925.08	10078.15	
i-1)	10" (250 mm) dia. and (4 mm) wall thickness	R.M	925.08	11363.35	
i-2)	10" (250 mm) dia. and (4.5 mm) wall thickness	R.M	925.08	12859.08	
j)	12" (300 mm) dia. and 1/4" (6 mm) wall thickness	R.M	1011.60	19151.28	
k)	15" (375 mm) dia. and 1/4" (6 mm) wall thickness	R.M	1011.60	22541.76	
l)	18" (450 mm) dia. and 1/4" (6 mm) wall thickness	R.M	1011.60	28649.52	
m)	20" (500 mm) dia. and 1/4" (6 mm) wall thickness	R.M	1649.88	30475.08	
n)	22" (550 mm) dia. and 1/4" (6 mm) wall thickness	R.M	1649.88	33412.68	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
27-19	Providing and Installing uPVC blind pipe of approved make registered with PSQCA in tubewell bore hole and/or laying, cutting, jointing, testing and disinfecting uPVC pipe lines in trenches.				
a)	Class B				
i)	3" (75 mm) inner dia.	R.M	67.44	773.69	
ii)	4" (100 mm) inner dia.	R.M	67.44	1062.55	
iii)	5" (125 mm) inner dia.	R.M	101.16	1631.16	
iv)	6" (150 mm) inner dia.	R.M	101.16	2181.96	
v)	8" (200 mm) inner dia.	R.M	101.16	2396.16	
vi)	10" (250 mm) inner dia.	R.M	134.88	5642.88	
vii)	12" (300 mm) inner dia.	R.M	134.88	8458.08	
viii)	14" (350 mm) inner dia.	R.M	134.88	10232.88	
b)	Class C				
i)	3" (75 mm) inner dia.	R.M	67.44	938.93	
ii)	4" (100 mm) inner dia.	R.M	67.44	1275.53	
iii)	5" (125 mm) inner dia.	R.M	101.16	2441.45	
iv)	6" (150 mm) inner dia.	R.M	101.16	3161.16	
v)	8" (200 mm) inner dia.	R.M	101.16	4844.16	
vi)	10" (250 mm) inner dia.	R.M	134.88	7723.68	
vii)	12" (300 mm) inner dia.	R.M	134.88	11762.88	
viii)	14" (350 mm) inner dia.	R.M	134.88	14088.48	
c)	Class D				
i)	1.25" (30 mm) inner dia.	R.M	33.72	339.72	
ii)	1.5" (40 mm) inner dia.	R.M	33.72	517.20	
iii)	2" (50 mm) inner dia.	R.M	67.44	908.33	
iv)	3" (75 mm) inner dia.	R.M	67.44	1169.04	
v)	4" (100 mm) inner dia.	R.M	67.44	1536.24	
vi)	5" (125 mm) inner dia.	R.M	101.16	2334.96	
vii)	6" (150 mm) inner dia.	R.M	101.16	3467.16	
viii)	8" (200 mm) inner dia.	R.M	101.16	5532.05	
ix)	10" (250 mm) inner dia.	R.M	134.88	8702.88	
x)	12" (300 mm) inner dia.	R.M	101.16	13871.16	
xi)	14" (350 mm) inner dia.	R.M	101.16	16869.96	
d)	Class E				
i)	1.25" (30 mm) inner dia.	R.M	33.72	547.80	
ii)	1.5" (40 mm) inner dia.	R.M	33.72	743.64	
iii)	2" (50 mm) inner dia.	R.M	67.44	985.44	
iv)	3" (75 mm) inner dia.	R.M	67.44	1259.62	
v)	4" (100 mm) inner dia.	R.M	67.44	1596.22	
vi)	5" (125 mm) inner dia.	R.M	101.16	2732.76	
vii)	6" (150 mm) inner dia.	R.M	101.16	3773.16	
viii)	8" (200 mm) inner dia.	R.M	101.16	5915.16	
ix)	10" (250 mm) inner dia.	R.M	134.88	12068.88	
x)	12" (300 mm) inner dia.	R.M	134.88	17882.88	
xi)	14" (350 mm) inner dia.	R.M	134.88	19963.68	
27-20	Testing and development of tubewell of size 6" (150 mm) inner dia. and above continously				
a)	Upto 1.5 cusecs (0.0425 cumec) discharge	Job		132044.98	
b)	Above 1.5 cusecs (0.0425 cumec) capacity	Job		165056.22	
c)	Cleaning of Bore hole /D&T through Compressor minum 360 psi OR 25 Bars Capicity.	Hr	460.80	16780.80	
d)	Drawdown/yeild test through Submersaible Pump including the cost of metirial and Labour Charges.	Hr	460.80	16720.80	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
27-21	Shrouding with graded pea gravel 3/8" to 1/8" (10 mm to 3mm) around tubewell bore hole.	Cu.m	2616.60	6216.60	
27-22	Providing, laying, cutting, jointing, testing and disinfecting C.I. pipe line in trenches with spigot and socket, chaulked lead or comet joints or flanged joints or tyton joints including cost of materials such as lead, comet and yarn. (Cost of specials and their installation not included).				
a)	3" (75 mm) inner dia.	R.M	134.88	2950.08	
b)	4" (100 mm) inner dia.	R.M	134.88	3929.28	
c)	6" (150 mm) inner dia.	R.M	202.32	6444.72	
d)	9" (225 mm) dia	R.M	337.20	13311.60	
27-23	Providing, laying, cutting, jointing, testing and disinfecting G.I. pipe line IIL or equivalent of approved make registered with PSQCA including the cost of specials and cost of painting 2 coats with bitumen to pipes and specials after cleaning and wrapping tightly hessian cloth soaked in Mexphalt composition around pipes.				
a)	Light duty				
i)	1/2" (15 mm) inner dia.	R.M	184.32	812.64	
ii)	3/4" (20 mm) inner dia.	R.M	184.32	992.16	
iii)	1" (25 mm) inner dia.	R.M	210.62	1465.22	
iv)	1.25" (30 mm) inner dia.	R.M	210.62	1818.14	
v)	1.5" (40 mm) inner dia.	R.M	246.72	2164.32	
vi)	2" (50 mm) inner dia.	R.M	246.72	2670.24	
vii)	2.5" (65 mm) inner dia.	R.M	303.48	3698.04	
viii)	3" (75 mm) inner dia.	R.M	303.48	4320.24	
ix)	4" (100 mm) inner dia.	R.M	337.20	6279.72	
b)	Medium duty				
i)	1/2" (15 mm) inner dia.	R.M	184.32	882.00	
ii)	3/4" (20 mm) inner dia.	R.M	184.32	1171.68	
iii)	1" (25 mm) inner dia.	R.M	210.62	1636.58	
iv)	1.25" (30 mm) inner dia.	R.M	210.62	2054.78	
v)	1.5" (40 mm) inner dia.	R.M	246.72	2602.92	
vi)	2" (50 mm) inner dia.	R.M	246.72	3253.68	
vii)	2.5" (65 mm) inner dia.	R.M	303.48	4538.52	
viii)	3" (75 mm) inner dia.	R.M	303.48	5234.16	
ix)	4" (100 mm) inner dia.	R.M	337.20	7385.40	
x)	5" (125 mm) inner dia.	R.M	415.32	10215.48	
xi)	6" (150 mm) inner dia.	R.M	415.32	12000.48	
27-24	Replacing burst/damaged G.I. pipe line with all excavation, cutting, providing new G.I. medium duty pipe, union, tees, bends, sockets, including threading etc. and painting with 2 coats of bitumen to pipes and specials after cleaning and wrapping tightly hessian cloth soaked in Maxphalt composition around pipes including cost of testing and disinfecting (cost of pipes and all accessories included)				
a)	1/2" (15 mm) inner dia.	R.M	674.40	1556.40	
b)	3/4" (20 mm) inner dia.	R.M	674.40	1846.08	
c)	1" (25 mm) inner dia.	R.M	674.40	2310.98	
d)	1.25" (30 mm) inner dia.	R.M	674.40	2729.18	
e)	1.5" (40 mm) inner dia.	R.M	674.40	3277.32	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
f)	2" (50 mm) inner dia.	R.M	674.40	3928.08	
g)	2.5" (65 mm) inner dia.	R.M	674.40	5212.92	
h)	3" (75 mm) inner dia.	R.M	674.40	5908.56	
i)	4" (100 mm) inner dia.	R.M	674.40	8059.80	
j)	5" (125 mm) inner dia.	R.M	674.40	10889.88	
k)	6" (150 mm) inner dia.	R.M	674.40	12674.88	
27-25	Providing, laying, cutting, jointing, testing and disinfecting cement concrete pipe line in trenches including comet joint and rubber ring.				
a)	Class B working pressure				
i)	3" (75 mm) inner dia.	R.M	337.20	1267.44	
ii)	4" (100 mm) inner dia.	R.M	337.20	1451.04	
iii)	6" (150 mm) inner dia.	R.M	505.80	2445.84	
iv)	8" (200 mm) inner dia.	R.M	505.80	3706.56	
v)	10" (250 mm) inner dia.	R.M	843.00	5433.00	
vi)	12" (300 mm) inner dia.	R.M	843.00	6620.28	
vii)	14" (350 mm) inner dia.	R.M	1180.20	8585.40	
viii)	16" (400 mm) inner dia	R.M	1180.20	10605.00	
ix)	18" (450 mm) inner dia.	R.M	1517.40	13145.40	
x)	20" (500 mm) inner dia.	R.M	1517.40	15593.40	
xi)	24" (600 mm) inner dia.	R.M	1686.00	22004.40	
b)	Class C working pressure				
i)	3" (75 mm) inner dia.	R.M	337.20	1212.36	
ii)	4" (100 mm) inner dia.	R.M	337.20	1585.68	
iii)	6" (150 mm) inner dia.	R.M	505.80	2745.72	
iv)	8" (200 mm) inner dia.	R.M	505.80	3994.20	
v)	10" (250 mm) inner dia.	R.M	843.00	5800.20	
vi)	12" (300 mm) inner dia.	R.M	843.00	7697.40	
vii)	14" (350 mm) inner dia.	R.M	1180.20	11706.60	
viii)	16" (400 mm) inner dia	R.M	1180.20	14399.40	
ix)	18" (450 mm) inner dia.	R.M	1517.40	17919.00	
x)	20" (500 mm) inner dia.	R.M	1517.40	21101.40	
xi)	24" (600 mm) inner dia.	R.M	1686.00	29226.00	
c)	Class D working pressure				
i)	3" (75 mm) inner dia.	R.M	337.20	1194.00	
ii)	4" (100 mm) inner dia.	R.M	337.20	1854.96	
iii)	6" (150 mm) inner dia.	R.M	505.80	2445.84	
iv)	8" (200 mm) inner dia.	R.M	505.80	5463.00	
v)	10" (250 mm) inner dia.	R.M	843.00	8064.60	
vi)	12" (300 mm) inner dia.	R.M	843.00	11247.00	
vii)	14" (350 mm) inner dia.	R.M	1180.20	17153.40	
viii)	16" (400 mm) inner dia	R.M	1180.20	21376.20	
ix)	18" (450 mm) inner dia.	R.M	1517.40	25997.40	
x)	20" (500 mm) inner dia.	R.M	1517.40	31383.00	
27-26	Providing, laying, cutting, jointing, testing and disinfecting Ductile iron pipe line in trenches including all fittings and accessories including protective coating.				
a)	4" (100 mm) inner dia.	R.M	1180.20	7039.20	
b)	6" (150 mm) inner dia.	R.M	1180.20	10252.20	
c)	8" (200 mm) inner dia.	R.M	1517.40	15125.40	
d)	10" (250 mm) inner dia.	R.M	1517.40	20291.40	
e)	12" (300 mm) inner dia.	R.M	2191.80	26635.80	
f)	16" (400 mm) inner dia	R.M	2191.80	40117.80	
g)	18" (450 mm) inner dia.	R.M	3372.00	50622.00	
h)	20" (500 mm) inner dia.	R.M	3372.00	69522.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
i)	24" (600 mm) inner dia.	R.M	4046.40	90860.40	
27-27	Providing and fixing C.I. specials of class-B such as bends, tees, cross, collars, reducers, tail pieces, flanged spigot, caps, flanged sockets, tapers, angle, branch and plugs including turning threading, facing and fitting for C.I. pipe line.				
a)	Cast iron S.S. specials with spigot and socket joint				
i)	3" to 6" (75 mm to 150 mm) dia.	Kg.	134.88	266.88	
ii)	8" to 12" (200 mm to 300 mm) inner dia.	Kg.	101.16	233.16	
iii)	15" to 18" (375 mm to 450 mm) inner dia.	Kg.	67.44	199.44	
b)	Cast iron flanged specials with flanged joints				
i)	3" to 6" (75 mm to 150 mm) dia.	Kg.	67.44	199.44	
ii)	8" to 12" (200 mm to 300 mm) inner dia.	Kg.	51.82	183.82	
iii)	15" to 18" (375 mm to 450 mm) inner dia.	Kg.	33.72	165.72	
c)	Cast iron specials with tyton joints				
i)	3" to 6" (75 mm to 150 mm) dia.	Kg.	33.72	189.72	
ii)	8" to 12" (200 mm to 300 mm) inner dia.	Kg.	33.72	213.72	
iii)	15" to 18" (375 mm to 450 mm) inner dia.	Kg.	33.72	249.72	
27-28	Providing and fixing C.I. special of BSS, Class-B such as bends, tees, cross, collar, reducers, tail pieces, flanged sockets, flanged spigots, caps, tapers, angle branch and plugs for asbestos cement pipe line with comet joint and rubber ring.				
a)	3" to 6" (75 mm to 150 mm) dia.	Kg.	168.60	300.60	
b)	8" to 18" (200 mm to 450 mm) inner dia.	Kg.	118.02	250.02	
c)	20" to 24" (500 mm to 600 mm) inner dia.	Kg.	84.30	216.30	
27-29	Providing and fixing C.I. sluice valve of BSS quality and weight, Class B, for C.I. pipe line and A.C. pipe line including cost of Jointing material.				
a)	2" (50 mm) inner dia.	Each	275.40	3580.20	
b)	3" (75 mm) inner dia.	Each	465.36	8298.96	
c)	4" (100 mm) inner dia.	Each	465.36	11726.16	
d)	6" (150 mm) inner dia.	Each	583.92	18699.12	
e)	9" 225 mm inner dia.	Each	583.92	29065.92	
f)	12" (300 mm) inner dia.	Each	843.00	45081.00	
g)	15" (375 mm) inner dia.	Each	843.00	68715.00	
h)	18" (450 mm) inner dia.	Each	1180.20	107230.20	
i)	21" (525 mm) inner dia.	Each	1180.20	143953.80	
j)	24" (600 mm) inner dia.	Each	1686.00	190758.00	
k)	27" (675 mm) inner dia.	Each	1686.00	241662.00	
l)	30" (750 mm) inner dia.	Each	2023.20	268057.20	
27-30-a	Providing and fixing of Raber Sluice Value/ Resilient Raber Gate Valve GGG-50 , DI+EPDM Disc, SS/Iron Stem with DI Hand Wheel have Working Pressure up to PN-16 & Max Temprature 120 C, Valve Tech Pak made used for Water/Severage/Oil/Gas Stem. Complete in all respect.				
i)	2" (50 mm) dia	Each	275.40	10355.40	
ii)	2.5" (63 mm) dia	Each	275.40	14135.40	
iii)	3" (75 mm) dia	Each	465.36	18105.36	
iv)	4" (100 mm) dia	Each	465.36	28185.36	
v)	6" (150 mm) dia	Each	583.92	49093.92	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
vi)	8" (200 mm) dia	Each	583.92	78703.92	
vii)	10" (250 mm) dia	Each	843.00	124323.00	
viii)	12" (300 mm) dia	Each	843.00	183543.00	
ix)	14" (350 mm) dia	Each	1011.60	265611.60	
x)	16" (400 mm) dia	Each	1011.60	372711.60	
xi)	18" (400 mm) dia	Each	1180.20	517780.20	
xii)	20" (500 mm) dia	Each	1180.20	731980.20	
xiii)	24" (600 mm) dia	Each	1348.80	1066048.80	
27-30-b	Supply and Installatio of Ductile iron Sluice Value / Gate Valve with DI Hand Wheel have Working Pressure up to PN-16 & Max Temprature 120 C, used for Water/Severage/Oil/Gas Stem. Complete in all respect.				
i)	Ductile iron Gate/ Sluice Value 3" dia	Each	465.36	18105.36	
ii)	Ductile iron Gate/ Sluice Value 4" dia	Each	465.36	28185.36	
iii)	Ductile iron Gate/ Sluice Value 6" dia	Each	583.92	49093.92	
iv)	Ductile iron Gate/ Sluice Value 8" dia	Each	583.92	78703.92	
v)	Ductile iron Gate/ Sluice Value 10" dia	Each	843.00	124323.00	
vi)	Ductile iron Gate/ Sluice Value 12" dia	Each	843.00	183543.00	
vii)	Ductile iron Gate/ Sluice Value 14" dia	Each	1011.60	265611.60	
vii)	Ductile iron Gate/ Sluice Value 16" dia	Each	1011.60	372711.60	
ix)	Ductile iron Gate/ Sluice Value 18" dia	Each	1180.20	517780.20	
x)	Ductile iron Gate/ Sluice Value 20" dia	Each	1180.20	731980.20	
xi)	Ductile iron Gate/ Sluice Value 24" dia	Each	1348.80	1066048.80	
27-31	Providing and fixing fire hydrants standard pattern 3" (75mm) dia. inlet and 2.5" (65mm) dia screw outlet. BSS quality and weight, cost of Jointing material is included.	Each	789.60	6969.60	
27-32-a	Providing and fixing air valve 2.5" (65 mm) inner dia.of BSS quality and weight, cost of Jointing material is included.				
i)	Single	Each	888.00	7068.00	
ii)	Double	Each	1686.00	14169.60	
27-32-b	Providing and fixing of air value working pressure up PN-16 best quality and weight,Valve Tech Pak made, including cost of Jointing material complete in all respect.				
i)	Single 3" inner dia	Each	888.00	15102.00	
ii)	Single 4" inner dia	Each	888.00	19675.20	
iii)	Double 3" inner dia	Each	1686.00	31968.00	
iv)	Double 4" inner dia	Each	1686.00	42226.80	
27-33	Cutting C.I. pipe and welding spigot or socket flanged or tyton end including finishing ends of pipe.				
a)	3" to 6" (75 mm to 150 mm) dia.	Each	366.36		
b)	8" to 12" (200 mm to 300 mm) inner dia.	Each	403.00		
c)	15" to 18" (375 mm to 450 mm) inner dia.	Each	443.30		
27-34	Providing and installing uPVC bends of of approved make registered with PSQCA.				
a)	Class B				
i)	3" (75 mm) inner dia.	Each	281.04	684.24	
ii)	4" (100 mm) inner dia.	Each	281.04	848.04	
iii)	5" (125 mm) inner dia.	Each	509.93	1190.33	
iv)	6" (150 mm) inner dia.	Each	509.93	4919.93	
v)	8" (200 mm) inner dia.	Each	642.36	9210.36	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Class D				
i)	1.25" (30 mm) inner dia.	Each	184.92	319.74	
ii)	1.5" (40 mm) inner dia.	Each	184.92	412.98	
iii)	2" (50 mm) inner dia.	Each	238.32	654.12	
iv)	3" (75 mm) inner dia.	Each	184.92	726.72	
v)	4" (100 mm) inner dia.	Each	337.20	1181.40	
vi)	5" (125 mm) inner dia.	Each	337.20	1408.20	
vii)	6" (150 mm) inner dia.	Each	450.91	7632.91	
27-35	Providing and installing PVC tees of of approved make registered with PSQCA				
a)	Class B				
i)	3" (75 mm) inner dia.	Each	460.80	1470.60	
ii)	4" (100 mm) inner dia.	Each	460.80	2615.04	
iii)	5" (125 mm) inner dia.	Each	631.68	4940.16	
iv)	6" (150 mm) inner dia.	Each	631.68	5074.80	
v)	8" (200 mm) inner dia.	Each	706.44	5418.84	
vi)	10" (250 mm) inner dia.	Each	706.44	5553.48	
vii)	12" (300 mm) inner dia.	Each	859.66	5841.34	
viii)	14" (350 mm) inner dia.	Each	859.66	5975.98	
b)	Class D				
i)	1.25" (30 mm) inner dia.	Each	298.75	635.35	
ii)	1.5" (40 mm) inner dia.	Each	298.75	663.07	
iii)	2" (50 mm) inner dia.	Each	337.20	795.24	
iv)	3" (75 mm) inner dia.	Each	337.20	1347.00	
v)	4" (100 mm) inner dia.	Each	524.88	2679.12	
vi)	5" (125 mm) inner dia.	Each	524.88	4833.36	
vii)	6" (150 mm) inner dia.	Each	714.98	5225.42	
27-36	Providing and installing uPVC bail or end plug of of approved make registered with PSQCA.				
a)	Class B				
i)	3" (75 mm) inner dia.	Each	460.80	1054.80	
ii)	4" (100 mm) inner dia.	Each	460.80	1186.80	
iii)	5" (125 mm) inner dia.	Each	631.68	1516.08	
iv)	6" (150 mm) inner dia.	Each	631.68	1621.68	
v)	8" (200 mm) inner dia.	Each	714.98	2562.98	
vi)	10" (250 mm) inner dia.	Each	714.98	3354.98	
vii)	12" (300 mm) inner dia.	Each	859.66	5347.66	
viii)	14" (350 mm) inner dia.	Each	859.66	5875.66	
b)	Class D				
i)	1.25" (30 mm) inner dia.	Each	313.56	366.36	
ii)	1.5" (40 mm) inner dia.	Each	313.56	366.36	
iii)	2" (50 mm) inner dia.	Each	356.14	424.78	
iv)	3" (75 mm) inner dia.	Each	356.14	1121.74	
v)	4" (100 mm) inner dia.	Each	524.88	1778.88	
vi)	5" (125 mm) inner dia.	Each	524.88	2623.68	
vii)	6" (150 mm) inner dia.	Each	659.45	3563.45	
27-37	Providing and installing PVC tappered core of of approved make registered with PSQCA.				
a)	Class B				
i)	3" (75 mm) inner dia.	Each	197.14	847.90	
ii)	4" (100 mm) inner dia.	Each	197.14	1422.10	
iii)	5" (125 mm) inner dia.	Each	230.40	3139.68	
iv)	6" (150 mm) inner dia.	Each	230.40	5972.40	
v)	8" (200 mm) inner dia.	Each	287.26	14450.86	
b)	Class D				
i)	1.25" (30 mm) inner dia.	Each	188.28	387.60	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
ii)	1.5" (40 mm) inner dia.	Each	188.28	478.68	
iii)	2" (50 mm) inner dia.	Each	230.40	651.48	
27-38	Providing and installing PVC conduit of Class B or D of of approved make registered with PSQCA				
a)	1.25" (30 mm) inner dia.	Each	184.92	360.42	
b)	1.5" (40 mm) inner dia.	Each	184.92	424.92	
c)	2" (50 mm) inner dia.	Each	230.40	629.40	
d)	3" (75 mm) inner dia.	Each	230.40	830.40	
e)	4" (100 mm) inner dia.	Each	273.12	1248.12	
27-39	Providing and installing PVC V socket of Class B or D of of approved make registered with PSQCA.				
a)	1.25" (30 mm) inner dia.	Each	195.79	249.79	
b)	1.5" (40 mm) inner dia.	Each	195.79	276.79	
c)	2" (50 mm) inner dia.	Each	230.40	357.90	
d)	3" (75 mm) inner dia.	Each	230.40	642.90	
e)	4" (100 mm) inner dia.	Each	282.31	1000.81	
27-40	Providing and installing PVC crosser of of approved make registered with PSQCA.				
a)	Class B				
i)	3" (75 mm) inner dia.	Each	434.11	1371.31	
ii)	4" (100 mm) inner dia.	Each	434.11	1952.11	
iii)	5" (125 mm) inner dia.	Each	631.68	3060.48	
iv)	6" (150 mm) inner dia.	Each	631.68	5383.68	
v)	8" (200 mm) inner dia.	Each	708.58	9684.58	
vi)	10" (250 mm) inner dia.	Each	708.58	18396.58	
vii)	12" (300 mm) inner dia.	Each	823.92	29995.92	
viii)	14" (350 mm) inner dia.	Each	823.92	42403.92	
b)	Class D				
i)	1.25" (30 mm) inner dia.	Each	294.48	637.68	
ii)	1.5" (40 mm) inner dia.	Each	294.48	763.08	
iii)	2" (50 mm) inner dia.	Each	337.20	918.00	
iv)	3" (75 mm) inner dia.	Each	337.20	1630.80	
v)	4" (100 mm) inner dia.	Each	522.74	2700.74	
vi)	5" (125 mm) inner dia.	Each	522.74	3756.74	
vii)	6" (150 mm) inner dia.	Each	708.58	7242.58	
27-41	Add extra for respective payable item of ground floor				
a)	For first floor	% increase		10.00%	
b)	For every additional floor above first floor	% increase		7.50%	
27-42	Providing, laying, cutting, jointing, testing and disinfecting HDPE pipes density 700-960 kg/cu.m and carbon black contants > 2% with DIN- 8074, 8075 or PS-3580:1997(rev.) ISO 9001-2000 pressure classification of PE -100 (black) for water PN-10, complete in all respects with specials and valves etc. including all fittings, connnections and jointing material				
a)	25 mm	R.M	115.20	233.76	
b)	32 mm	R.M	115.20	283.68	
c)	40 mm	R.M	115.20	361.68	
d)	50 mm	R.M	115.20	497.40	
e)	63 mm	R.M	230.40	843.48	
f)	75 mm	R.M	230.40	1080.60	
g)	90 mm	R.M	230.40	1470.60	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
h)	110 mm	R.M	230.40	2071.20	
i)	125 mm	R.M	230.40	2645.28	
j)	140 mm	R.M	276.48	3755.28	
k)	160 mm	R.M	276.48	4114.08	
l)	180 mm	R.M	276.48	5112.48	
m)	200 mm	R.M	345.60	6351.60	
n)	225 mm	R.M	345.60	7744.68	
o)	250 mm	R.M	345.60	9412.32	
p)	280 mm	R.M	460.80	13474.32	
q)	315 mm	R.M	460.80	14884.56	
r)	355 mm	R.M	460.80	18820.44	
s)	400 mm	R.M	576.00	23776.32	
t)	450 mm	R.M	576.00	29972.64	
u)	500 mm	R.M	576.00	36900.60	
v)	560 mm	R.M	691.20	46190.16	
w)	630 mm	R.M	691.20	73933.20	
x)	800 mm	R.M	691.20	93561.12	
27-43	Providing, laying, cutting, jointing, testing and disinfecting HDPE pipes density 700-960 kg/cu.m and carbon black contants > 2% with DIN- 8074, 8075 or PS-3580:1997 (rev.) ISO 9001-2000 pressure classification of PE -100 (black) for water PN-16, complete in all respects with specials and valves etc. (including all fittings)				
a)	20 mm	R.M	46.08	152.16	
b)	25 mm	R.M	115.20	279.00	
c)	32 mm	R.M	115.20	377.28	
d)	40 mm	R.M	115.20	520.80	
e)	50 mm	R.M	115.20	754.80	
f)	63 mm	R.M	230.40	1236.60	
g)	75 mm	R.M	230.40	1650.00	
h)	90 mm	R.M	230.40	2274.00	
i)	110 mm	R.M	230.40	3256.80	
j)	125 mm	R.M	230.40	3919.80	
k)	140.00	R.M	276.48	5798.88	
l)	160 mm	R.M	276.48	6688.08	
m)	180 mm	R.M	276.48	7904.88	
n)	200 mm	R.M	345.60	10360.80	
o)	225 mm	R.M	345.60	12251.52	
p)	250 mm	R.M	345.60	16179.60	
q)	280 mm	R.M	460.80	21286.80	
r)	315 mm	R.M	460.80	23701.68	
s)	355 mm	R.M	460.80	29965.08	
t)	400 mm	R.M	576.00	38031.60	
u)	450 mm	R.M	576.00	48009.36	
v)	500 mm	R.M	576.00	59102.52	
w)	560 mm	R.M	691.20	74011.20	
x)	630 mm	R.M	691.20	93586.08	
y)	800 mm	R.M	691.20	145038.00	
27-44	Providing and fixing LDPE overhead tank manufactured by Dura or equivalent on top of any floor				
a)	300 gallons capacity	Each	2188.80	19828.80	
b)	500 gallons capacity	Each	2188.80	32428.80	
c)	1000 gallons capacity	Each	2188.80	62668.80	
d)	1200 gallons capacity	Each	2188.80	75268.80	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
e)	1500 gallons capacity	Each	2188.80	92908.80	
f)	1800 gallons capacity	Each	3283.20	131803.20	
27-45	Cleaning of overhead water tank	Cu.m	39.08	39.39	
27-46	Supply and fixing 1/8" thick galvanized iron sheet water tank of approved design and size including covering and locking arrangment and erection and positioning excluding the cost of pillars and painting	Each	1281.60	57981.60	
27-47	Providing, laying, cutting, jointing, testing and disinfecting PPRC pipes confirming to ISO 4427, PN-20, complete in all respects with specials and valves etc. including all fittings, connnections and jointing material				
a)	15 mm	R.M	18.43	205.63	
b)	20 mm	R.M	18.43	411.55	
c)	25 mm	R.M	18.43	628.39	
d)	32 mm	R.M	18.43	1023.07	
e)	40 mm	R.M	18.43	1514.47	
f)	50 mm	R.M	18.43	2459.83	
g)	63 mm	R.M	18.43	3918.43	
h)	75 mm	R.M	18.43	5533.03	
i)	90 mm	R.M	18.43	7994.71	
j)	110 mm	R.M	23.38	12785.74	
27-48	Supplying uPVC blind pipe IIL, Dadex or equivalent make registered with PSQCA.				
a)	Class B				
i)	3" (75 mm) inner dia.	R.M		756.00	
ii)	4" (100 mm) inner dia.	R.M		1138.80	
iii)	5" (125 mm) inner dia.	R.M		1579.20	
iv)	6" (150 mm) inner dia.	R.M		2200.80	
v)	8" (200 mm) inner dia.	R.M		3326.40	
vi)	10" (250 mm) inner dia.	R.M		7096.80	
vii)	12" (300 mm) inner dia.	R.M		9934.80	
viii)	14" (350 mm) inner dia.	R.M		11934.00	
ix)	16" (400 mm) inner dia	R.M		12366.00	
x)	18" (450 mm) inner dia.	R.M		17040.00	
xi)	20" (500 mm) inner dia.	R.M		23400.00	
xii)	22" (550 mm) inner dia.	R.M		27300.00	
xiii)	24" (600 mm) inner dia.	R.M		32640.00	
b)	Class C				
i)	3" (75 mm) inner dia.	R.M		908.40	
ii)	4" (100 mm) inner dia.	R.M		1486.80	
iii)	5" (125 mm) inner dia.	R.M		2247.60	
iv)	6" (150 mm) inner dia.	R.M		3189.60	
v)	8" (200 mm) inner dia.	R.M		4932.00	
vi)	10" (250 mm) inner dia.	R.M		8520.00	
vii)	12" (300 mm) inner dia.	R.M		10920.00	
viii)	14" (350 mm) inner dia.	R.M		12240.00	
ix)	16" (400 mm) inner dia	R.M		13860.00	
x)	18" (450 mm) inner dia.	R.M		20100.00	
xi)	20" (500 mm) inner dia.	R.M		24000.00	
xii)	22" (550 mm) inner dia.	R.M		28560.00	
xiii)	24" (600 mm) inner dia.	R.M			
c)	Class D				
i)	3" (75 mm) inner dia.	R.M		1162.80	
ii)	4" (100 mm) inner dia.	R.M		1947.60	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
iii)	5" (125 mm) inner dia.	R.M		2928.00	
iv)	6" (150 mm) inner dia.	R.M		4192.80	
v)	8" (200 mm) inner dia.	R.M		6468.00	
vi)	10" (250 mm) inner dia.	R.M		9600.00	
vii)	12" (300 mm) inner dia.	R.M		11760.00	
viii)	14" (350 mm) inner dia.	R.M		14100.00	
ix)	16" (400 mm) inner dia	R.M		17400.00	
x)	18" (450 mm) inner dia.	R.M		22560.00	
xi)	20" (500 mm) inner dia.	R.M		27840.00	
xii)	22" (550 mm) inner dia.	R.M		30000.00	
xiii)	24" (600 mm) inner dia.	R.M			
d)	Class E				
i)	3" (75 mm) inner dia.	R.M		1438.80	
ii)	4" (100 mm) inner dia.	R.M		2384.40	
iii)	5" (125 mm) inner dia.	R.M		3616.80	
iv)	6" (150 mm) inner dia.	R.M		5150.40	
v)	8" (200 mm) inner dia.	R.M		7921.20	
vi)	10" (250 mm) inner dia.	R.M		11040.00	
vii)	12" (300 mm) inner dia.	R.M		13200.00	
viii)	14" (350 mm) inner dia.	R.M		14880.00	
ix)	16" (400 mm) inner dia	R.M		21120.00	
x)	18" (450 mm) inner dia.	R.M		26280.00	
xi)	20" (500 mm) inner dia.	R.M		31020.00	
xii)	22" (550 mm) inner dia.	R.M		33480.00	
xiii)	24" (600 mm) inner dia.	R.M			
27-49	Installing uPVC pipe of approved make registered with PSQCA in sewerlines and/or laying, cutting, jointing, testing including all specials in pipe lines in trenches.				
a)	Class B				
i)	3" (75 mm) inner dia.	R.M	67.44	997.92	
ii)	4" (100 mm) inner dia.	R.M	67.44	1503.22	
iii)	5" (125 mm) inner dia.	R.M	101.16	2084.54	
iv)	6" (150 mm) inner dia.	R.M	101.16	2905.06	
v)	8" (200 mm) inner dia.	R.M	101.16	4390.85	
vi)	10" (250 mm) inner dia.	R.M	134.88	9367.78	
vii)	12" (300 mm) inner dia.	R.M	134.88	13113.94	
viii)	14" (350 mm) inner dia.	R.M	134.88	15752.88	
ix)	16" (400 mm) inner dia	R.M	202.32	16323.12	
x)	18" (450 mm) inner dia.	R.M	202.32	22492.80	
xi)	20" (500 mm) inner dia.	R.M	202.32	30888.00	
xii)	22" (550 mm) inner dia.	R.M	337.20	36036.00	
xiii)	24" (600 mm) inner dia.	R.M	337.20	43084.80	
b)	Class C				
i)	3" (75 mm) inner dia.	R.M	67.44	1199.09	
ii)	4" (100 mm) inner dia.	R.M	67.44	1962.58	
iii)	5" (125 mm) inner dia.	R.M	101.16	2966.83	
iv)	6" (150 mm) inner dia.	R.M	101.16	4210.27	
v)	8" (200 mm) inner dia.	R.M	101.16	6510.24	
vi)	10" (250 mm) inner dia.	R.M	134.88	11246.40	
vii)	12" (300 mm) inner dia.	R.M	134.88	14414.40	
viii)	14" (350 mm) inner dia.	R.M	134.88	16156.80	
ix)	16" (400 mm) inner dia	R.M	202.32	18295.20	
x)	18" (450 mm) inner dia.	R.M	202.32	26532.00	
xi)	20" (500 mm) inner dia.	R.M	202.32	31680.00	
xii)	22" (550 mm) inner dia.	R.M	337.20	37699.20	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
xiii)	24" (600 mm) inner dia.	R.M	337.20	45144.00	
c)	Class D				
i)	3" (75 mm) inner dia.	R.M	67.44	1534.90	
ii)	4" (100 mm) inner dia.	R.M	67.44	2570.83	
iii)	5" (125 mm) inner dia.	R.M	101.16	3864.96	
iv)	6" (150 mm) inner dia.	R.M	101.16	5534.50	
v)	8" (200 mm) inner dia.	R.M	101.16	8537.76	
vi)	10" (250 mm) inner dia.	R.M	134.88	12672.00	
vii)	12" (300 mm) inner dia.	R.M	134.88	15523.20	
viii)	14" (350 mm) inner dia.	R.M	134.88	18612.00	
ix)	16" (400 mm) inner dia	R.M	202.32	22968.00	
x)	18" (450 mm) inner dia.	R.M	202.32	29779.20	
xi)	20" (500 mm) inner dia.	R.M	202.32	36748.80	
xii)	22" (550 mm) inner dia.	R.M	337.20	39600.00	
xiii)	24" (600 mm) inner dia.	R.M	337.20	47124.00	
d)	Class E				
i)	3" (75 mm) inner dia.	R.M	67.44	1899.22	
ii)	4" (100 mm) inner dia.	R.M	67.44	3147.41	
iii)	5" (125 mm) inner dia.	R.M	101.16	4774.18	
iv)	6" (150 mm) inner dia.	R.M	101.16	6798.53	
v)	8" (200 mm) inner dia.	R.M	101.16	10455.98	
vi)	10" (250 mm) inner dia.	R.M	134.88	14572.80	
vii)	12" (300 mm) inner dia.	R.M	134.88	17424.00	
viii)	14" (350 mm) inner dia.	R.M	134.88	19641.60	
ix)	16" (400 mm) inner dia	R.M	202.32	27878.40	
x)	18" (450 mm) inner dia.	R.M	202.32	34689.60	
xi)	20" (500 mm) inner dia.	R.M	202.32	40946.40	
xii)	22" (550 mm) inner dia.	R.M	337.20	44193.60	
xiii)	24" (600 mm) inner dia.	R.M	337.20	52034.40	
27-50	Supply of HDPE pipes density 700 - 960 Kg/ cu.m arbon black contyent .2% DIN 8074, 8075 orPS 3580-1997 (rev.) ISO 9001-2000 pressure clasification of PF 100(black) for water PN-16				
a)	20 mm	R.M		81.60	
b)	25 mm	R.M		126.00	
c)	32 mm	R.M		201.60	
d)	40 mm	R.M		312.00	
e)	50 mm	R.M		492.00	
f)	63 mm	R.M		774.00	
g)	75 mm	R.M		1092.00	
h)	90 mm	R.M		1572.00	
i)	110 mm	R.M		2328.00	
j)	125 mm	R.M		2838.00	
k)	140 mm	R.M		4248.00	
l)	160 mm	R.M		4932.00	
m)	180 mm	R.M		5868.00	
n)	200 mm	R.M		7704.00	
o)	225 mm	R.M		9158.40	
p)	250 mm	R.M		12180.00	
q)	280 mm	R.M		16020.00	
r)	315 mm	R.M		17877.60	
s)	355 mm	R.M		22695.60	
t)	400 mm	R.M		28812.00	
u)	450 mm	R.M		36487.20	
v)	500 mm	R.M		45020.40	
w)	560 mm	R.M		56400.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
x)	630 mm	R.M		71457.60	
y)	800 mm	R.M		111036.00	
27-51	laying, cutting, jointing, testing and disinfecting HDPE pipes density 700-960 kg/cu.m and carbon black contants > 2% with DIN-8074, 8075 or PS-3580:1997 (rev.) ISO 9001-2000 pressure classification of PE -100 (black) for water PN-16, complete in all respects.				
a)	20 mm	R.M	46.08	47.71	
b)	25 mm	R.M	115.20	117.72	
c)	32 mm	R.M	115.20	119.23	
d)	40 mm	R.M	115.20	121.44	
e)	50 mm	R.M	115.20	125.04	
f)	63 mm	R.M	230.40	245.88	
g)	75 mm	R.M	230.40	252.24	
h)	90 mm	R.M	230.40	261.84	
i)	110 mm	R.M	230.40	276.96	
j)	125 mm	R.M	230.40	287.16	
k)	140 mm	R.M	276.48	361.44	
l)	160 mm	R.M	276.48	375.12	
m)	180 mm	R.M	276.48	393.84	
n)	200 mm	R.M	345.60	499.68	
o)	225 mm	R.M	345.60	528.77	
p)	250 mm	R.M	345.60	589.20	
q)	280 mm	R.M	460.80	781.20	
r)	315 mm	R.M	460.80	818.35	
s)	355 mm	R.M	460.80	914.71	
t)	400 mm	R.M	576.00	1152.24	
u)	450 mm	R.M	576.00	1305.74	
v)	500 mm	R.M	576.00	1476.41	
w)	560 mm	R.M	691.20	1819.20	
x)	630 mm	R.M	691.20	2120.35	
y)	800 mm	R.M	691.20	2911.92	
27-52	Supplying HDPE pipes density 700-960 kg/cu.m and carbon black contants > 2% with DIN-8074, 8075 or PS-3580:1997(rev.) ISO 9001-2000 pressure classification of PE -100 (black) for water PN-10 including specials and valves.				
a)	25 mm	R.M		91.20	
b)	32 mm	R.M		129.60	
c)	40 mm	R.M		189.60	
d)	50 mm	R.M		294.00	
e)	63 mm	R.M		471.60	
f)	75 mm	R.M		654.00	
g)	90 mm	R.M		954.00	
h)	110 mm	R.M		1416.00	
i)	125 mm	R.M		1857.60	
j)	140 mm	R.M		2676.00	
k)	160 mm	R.M		2952.00	
l)	180 mm	R.M		3720.00	
m)	200 mm	R.M		4620.00	
n)	225 mm	R.M		5691.60	
o)	250 mm	R.M		6974.40	
p)	280 mm	R.M		10010.40	
q)	315 mm	R.M		11095.20	
r)	355 mm	R.M		14122.80	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
s)	400 mm	R.M		17846.40	
t)	450 mm	R.M		22612.80	
u)	500 mm	R.M		27942.00	
v)	560 mm	R.M		34999.20	
w)	630 mm	R.M		56340.00	
x)	800 mm	R.M		71438.40	
27-53	laying, cutting, jointing, testing and disinfecting HDPE pipes density 700-960 kg/cu.m and carbon black contants > 2% with DIN-8074, 8075 or PS-3580:1997 (rev.) ISO 9001-2000 pressure classification of PE -100 (black) for water PN-10, complete in all respects.				
a)	25 mm	R.M	115.20	117.02	
b)	32 mm	R.M	115.20	117.79	
c)	40 mm	R.M	115.20	118.99	
d)	50 mm	R.M	230.40	236.28	
e)	63 mm	R.M	230.40	239.83	
f)	75 mm	R.M	230.40	243.48	
g)	90 mm	R.M	230.40	249.48	
h)	110 mm	R.M	230.40	258.72	
i)	125 mm	R.M	276.48	313.63	
j)	140 mm	R.M	276.48	330.00	
k)	160 mm	R.M	276.48	335.52	
l)	180 mm	R.M	345.60	420.00	
m)	200 mm	R.M	345.60	438.00	
n)	225 mm	R.M	345.60	459.43	
o)	250 mm	R.M	460.80	600.29	
p)	280 mm	R.M	460.80	661.01	
q)	315 mm	R.M	460.80	682.70	
r)	355 mm	R.M	576.00	858.46	
s)	400 mm	R.M	576.00	932.93	
t)	450 mm	R.M	576.00	1028.26	
u)	500 mm	R.M	691.20	1250.04	
v)	560 mm	R.M	691.20	1391.18	
w)	630 mm	R.M	691.20	1818.00	
x)	800 mm	R.M	691.20	2119.97	
27-54	Supplying HDPE pipes density 700-960 kg/cu.m and carbon black contants > 2% with DIN-8074, 8075 or PS-3580:1997(rev.) ISO 9001-2000 pressure classification of PE -100 (black) for water PN-12 including specials and valves				
a)	20 mm	R.M		60.00	
b)	25 mm	R.M		110.40	
c)	32 mm	R.M		170.40	
d)	40 mm	R.M		261.60	
e)	50 mm	R.M		408.00	
f)	63 mm	R.M		642.00	
g)	75 mm	R.M		912.00	
h)	90 mm	R.M		1326.00	
i)	110 mm	R.M		1956.00	
j)	125 mm	R.M		1956.00	
k)	140 mm	R.M		2880.00	
l)	160 mm	R.M		4140.00	
m)	180 mm	R.M		4800.00	
n)	200 mm	R.M		6456.00	
o)	225 mm	R.M		7440.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
p)	250 mm	R.M		10104.00	
q)	280 mm	R.M		11160.00	
r)	315 mm	R.M		14810.40	
s)	355 mm	R.M		18778.80	
t)	400 mm	R.M		23812.80	
u)	450 mm	R.M		30160.80	
v)	500 mm	R.M		37214.40	
w)	560 mm	R.M		46662.00	
x)	630 mm	R.M		59019.60	
y)	800 mm	R.M		95341.20	
27-55	laying, cutting, jointing, testing and disinfecting HDPE pipes density 700-960 kg/cu.m and carbon black contants > 2% with DIN-8074, 8075 or PS-3580:1997(rev.) ISO 9001-2000 pressure classification of PE -100 (black) for water PN-12, complete in all respects with specials and valves etc. including all fittings, connnections and jointing material				
a)	20 mm	R.M	115.20	116.40	
b)	25 mm	R.M	115.20	117.41	
c)	32 mm	R.M	115.20	118.61	
d)	40 mm	R.M	115.20	120.43	
e)	50 mm	R.M	230.40	238.56	
f)	63 mm	R.M	230.40	243.24	
g)	75 mm	R.M	230.40	248.64	
h)	90 mm	R.M	230.40	256.92	
i)	110 mm	R.M	230.40	269.52	
j)	125 mm	R.M	276.48	315.60	
k)	140 mm	R.M	276.48	334.08	
l)	160 mm	R.M	276.48	359.28	
m)	180 mm	R.M	345.60	441.60	
n)	200 mm	R.M	345.60	474.72	
o)	225 mm	R.M	345.60	494.40	
p)	250 mm	R.M	460.80	662.88	
q)	280 mm	R.M	460.80	684.00	
r)	315 mm	R.M	460.80	757.01	
s)	355 mm	R.M	576.00	951.58	
t)	400 mm	R.M	576.00	1052.26	
u)	450 mm	R.M	576.00	1179.22	
v)	500 mm	R.M	691.20	1435.49	
w)	560 mm	R.M	691.20	1624.44	
x)	630 mm	R.M	691.20	1871.59	
y)	800 mm	R.M	691.20	2598.02	
27-56	Supplying HDPE pipes density 700-960 kg/cu.m and carbon black contants > 2% with DIN-8074, 8075 or PS-3580:1997(rev.) ISO 9001-2000 pressure classification of PE -100 (black) for water PN-8 including specials and valves.				
a)	40 mm	R.M		162.00	
b)	50 mm	R.M		246.00	
c)	63 mm	R.M		378.00	
d)	75 mm	R.M		528.00	
e)	90 mm	R.M		768.00	
f)	110 mm	R.M		1158.00	
g)	125 mm	R.M		1464.00	
h)	140 mm	R.M		2328.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
i)	160 mm	R.M		2436.00	
j)	180 mm	R.M		2976.00	
k)	200 mm	R.M		3780.00	
l)	225 mm	R.M		5460.00	
m)	250 mm	R.M		5844.00	
n)	280 mm	R.M		7380.00	
o)	315 mm	R.M		9852.00	
p)	355 mm	R.M		12512.40	
q)	400 mm	R.M		15952.80	
r)	450 mm	R.M		20175.60	
s)	500 mm	R.M		24891.60	
t)	560 mm	R.M		31156.80	
u)	630 mm	R.M		39355.20	
v)	800 mm	R.M		63618.00	
27-57	laying, cutting, jointing, testing and disinfecting HDPE pipes density 700-960 kg/cu.m and carbon black contants > 2% with DIN-8074, 8075 or PS-3580:1997(rev.) ISO 9001-2000 pressure classification of PE -100 (black) for water PN-8, complete in all respects with specials and valves etc. including all fittings, connnections and jointing material				
a)	40 mm	R.M	115.20	118.44	
b)	50 mm	R.M	115.20	120.12	
c)	63 mm	R.M	230.40	237.96	
d)	75 mm	R.M	230.40	240.96	
e)	90 mm	R.M	230.40	245.76	
f)	110 mm	R.M	230.40	253.56	
g)	125 mm	R.M	230.40	259.68	
h)	140 mm	R.M	276.48	323.04	
i)	160 mm	R.M	276.48	325.20	
j)	180 mm	R.M	276.48	336.00	
k)	200 mm	R.M	345.60	421.20	
l)	225 mm	R.M	345.60	454.80	
m)	250 mm	R.M	345.60	462.48	
n)	280 mm	R.M	460.80	608.40	
o)	315 mm	R.M	460.80	657.84	
p)	355 mm	R.M	460.80	711.05	
q)	400 mm	R.M	576.00	895.06	
r)	450 mm	R.M	576.00	979.51	
s)	500 mm	R.M	576.00	1073.83	
t)	560 mm	R.M	691.20	1314.34	
u)	630 mm	R.M	691.20	1478.30	
v)	800 mm	R.M	691.20	1963.56	
27-58	Providing & fixing of HDPE specials such as bends, Tee, Adapter PN-16 Confirming to PSQAC standard etc				
a)	Providing and fixing HDPE Flanged Adoptor				
i)	Flanged Adoptor 63mm	Each	115.20	1540.80	
ii)	Flanged Adoptor 75mm	Each	115.20	2029.20	
iii)	Flanged Adoptor 90mm	Each	230.40	2593.20	
iv)	Flanged Adoptor 110mm	Each	230.40	3768.00	
v)	Flanged Adoptor 125mm	Each	230.40	5444.40	
vi)	Flanged Adoptor 160mm	Each	345.60	7090.80	
vii)	Flanged Adoptor 180mm	Each	345.60	10641.60	
viii)	Flanged Adoptor 200mm	Each	345.60	20383.20	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
ix)	Flanged Adoptor 225mm	Each	345.60	24633.60	
x)	Flanged Adoptor 250mm	Each	460.80	32074.80	
xi)	Flanged Adoptor 280mm	Each	460.80	41644.80	
xii)	Flanged Adoptor 315mm	Each	460.80	51148.80	
b)	Providing and fixing HDPE Band 90 & 45				
i)	Bend 63mm	Each	115.20	326.40	
ii)	Bend 75mm	Each	115.20	636.60	
iii)	Bend 90mm	Each	230.40	864.00	
iv)	Bend 110mm	Each	230.40	1088.40	
v)	Bend 125mm	Each	230.40	2804.40	
vi)	Bend 160mm	Each	345.60	3645.60	
vii)	Bend 180mm	Each	345.60	4437.60	
viii)	Bend 200mm	Each	345.60	5955.60	
ix)	Bend 225mm	Each	345.60	6813.60	
x)	Bend 250mm	Each	460.80	7588.80	
xi)	Bend 280mm	Each	460.80	8050.80	
xii)	Bend 315mm	Each	460.80	9040.80	
c)	Providing and fixing HDPE Tee Equal				
i)	Tee Equal 63 mm	Each	69.12	663.12	
ii)	Tee Equal 75mm	Each	69.12	781.92	
iii)	Tee Equal 90mm	Each	115.20	1026.00	
iv)	Tee Equal 110 mm	Each	115.20	1408.80	
v)	Tee Equal 125 mm	Each	161.28	3923.28	
vi)	Tee Equal 160mm	Each	161.28	6233.28	
vii)	Tee Equal 180mm	Each	230.40	11450.40	
viii)	Tee Equal 200mm	Each	230.40	18974.40	
ix)	Tee Equal 225 mm	Each	276.48	27996.48	
x)	Tee Equal 250mm	Each	322.56	45862.56	
xi)	Tee Equal 280 mm	Each	322.56	63682.56	
xii)	Tee Equal 315mm	Each	460.80	74248.80	
d)	Providing and fixing HDPE End Cap				
i)	End Cap 63 mm	Each	69.12	227.52	
ii)	End Cap 75mm	Each	69.12	313.32	
iii)	End Cap 90mm	Each	115.20	432.00	
iv)	End Cap 110 mm	Each	115.20	524.40	
v)	End Cap 125 mm	Each	161.28	1111.68	
vi)	End Cap 160mm	Each	161.28	2114.88	
vii)	End cap 180mm	Each	230.40	3464.40	
viii)	End Cap 200mm	Each	230.40	5312.40	
ix)	End Cap 225 mm	Each	276.48	7668.48	
x)	End Cap 250mm	Each	322.56	11542.56	
e)	Providing and fixing HDPE Cross				
i)	Cross 63 mm	Each	69.12	927.12	
ii)	Cross 75mm	Each	69.12	1059.12	
iii)	Cross 90mm	Each	115.20	1316.40	
iv)	Cross 110 mm	Each	115.20	2029.20	
v)	Cross 160 mm	Each	161.28	4913.28	
vi)	Cross 200 mm	Each	161.28	24977.28	
vii)	Cross 250 mm	Each	230.40	61214.40	
viii)	Cross 315 mm	Each	230.40	105830.40	
f)	Providing and fixing HDPE MS Flange				
i)	MS Flange 90 mm	Each	69.12	2511.12	
ii)	MS Flange 110 mm	Each	69.12	2973.12	
iii)	MS Flange 160 mm	Each	115.20	4207.20	
iv)	MS Flange 200 mm	Each	115.20	9091.20	
v)	MS Flange 250 mm	Each	161.28	15341.28	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
vi)	MS Flange 280 mm	Each	161.28	16925.28	
g)	Providing and fixing HDPE PP Flange				
i)	PP Flange 90 mm	Each	69.12	1587.12	
ii)	PP Flange 110 mm	Each	69.12	2022.72	
iii)	PP Flange 160 mm	Each	115.20	3085.20	
iv)	PP Flange 200 mm	Each	115.20	7507.20	
v)	PP Flange 250 mm	Each	161.28	12305.28	
h)	Providing and fixing HDPE Reducer Spigot				
i)	Reducer Spigot 63x50	Each	69.12	260.52	
ii)	Reducer Spigot 75x63	Each	69.12	319.92	
iii)	Reducer Spigot 90x50	Each	115.20	491.40	
iv)	Reducer Spigot 90x63	Each	115.20	458.40	
v)	Reducer Spigot 90x75	Each	161.28	484.68	
vi)	Reducer Spigot 110x50	Each	161.28	794.88	
vii)	Reducer Spigot 110x63	Each	230.40	837.60	
viii)	Reducer Spigot 110x75	Each	230.40	811.20	
ix)	Reducer Spigot 110x90	Each	276.48	824.28	
x)	Reducer Spigot 125x90	Each	322.56	1180.56	
xi)	Reducer Spigot 125x110	Each	322.56	1127.76	
xii)	Reducer Spigot 160x63	Each	460.80	2731.20	
xiii)	Reducer Spigot 160x75	Each	460.80	2638.80	
xiv)	Reducer Spigot 160x90	Each	460.80	2546.40	
xv)	Reducer Spigot 160x110	Each	460.80	2335.20	
xvi)	Reducer Spigot 180x90	Each	460.80	3298.80	
xvii)	Reducer Spigot 180x125	Each	460.80	3034.80	
xviii)	Reducer Spigot 200x90	Each	460.80	5014.80	
xix)	Reducer Spigot 200x110	Each	460.80	4684.80	
xx)	Reducer Spigot 200x160	Each	460.80	4222.80	
xxi)	Reducer Spigot 225x90	Each	460.80	6796.80	
xxii)	Reducer Spigot 225x110	Each	460.80	6598.80	
xxiii)	Reducer Spigot 225x160	Each	460.80	6004.80	
xxiv)	Reducer Spigot 250x90	Each	460.80	10360.80	
xxv)	Reducer Spigot 250x110	Each	460.80	9964.80	
xxvi)	Reducer Spigot 250x160	Each	460.80	9436.80	
xxvii)	Reducer Spigot 250x200	Each	460.80	8314.80	
xxviii)	Reducer Spigot 280x110	Each	460.80	15640.80	
xxix)	Reducer Spigot 280x250	Each	460.80	22636.80	
xxx)	Reducer Spigot 315x90	Each	460.80	22240.80	
xxxi)	Reducer Spigot 315x110	Each	460.80	24352.80	
xxxii)	Reducer Spigot 315x160	Each	460.80	28444.80	
xxxiii)	Reducer Spigot 315x250	Each	460.80	30820.80	
i)	Providing and fixing HDPE Reducer Tee				
i)	Reducer Tee 63x50 mm	Each	69.12	570.72	
ii)	Reducer Tee 75x63 mm	Each	69.12	781.92	
iii)	Reducer Tee 90x50	Each	115.20	1118.40	
iv)	Reducer Tee 90x63	Each	115.20	1184.40	
v)	Reducer Tee 90x75	Each	161.28	1283.28	
vi)	Reducer Tee 110x50	Each	161.28	1943.28	
vii)	Reducer Tee 110x63	Each	230.40	2104.80	
viii)	Reducer Tee 110x75	Each	230.40	2184.00	
ix)	Reducer Tee 110x90	Each	276.48	2322.48	
x)	Reducer Tee 125x90	Each	322.56	4216.56	
xi)	Reducer Tee 125x110	Each	322.56	4546.56	
xii)	Reducer Tee 160x63	Each	460.80	9634.80	
xiii)	Reducer Tee 160x75	Each	460.80	10228.80	
xiv)	Reducer Tee 160x90	Each	460.80	10756.80	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
xv)	Reducer Tee 160x110	Each	460.80	11152.80	
xvi)	Reducer Tee 180x90	Each	460.80	17884.80	
xvii)	Reducer Tee 180x125	Each	460.80	19996.80	
xviii)	Reducer Tee 200x90	Each	460.80	24484.80	
xix)	Reducer Tee 200x110	Each	460.80	26596.80	
xx)	Reducer Tee 200x160	Each	460.80	28840.80	
xxi)	Reducer Tee 225x90	Each	460.80	34780.80	
xxii)	Reducer Tee 225x110	Each	460.80	38080.80	
xxiii)	Reducer Tee 225x160	Each	460.80	39796.80	
xxiv)	Reducer Tee 250x90	Each	460.80	54844.80	
xxv)	Reducer Tee 250x110	Each	460.80	59200.80	
xxvi)	Reducer Tee 250x160	Each	460.80	63556.80	
xxvii)	Reducer Tee 250x200	Each	460.80	65800.80	
xxviii)	Reducer Tee 280x110	Each	460.80	65800.80	
xxix)	Reducer Tee 280x250	Each	460.80	70420.80	
xxx)	Reducer Tee 315x90	Each	460.80	59860.80	
xxxi)	Reducer Tee 315x110	Each	460.80	62764.80	
xxxii)	Reducer Tee 315x160	Each	460.80	65800.80	
xxxiii)	Reducer Spigot 315x250	Each	460.80	73060.80	
27-59	Fixing/Jointing of HDPE Pipe with Compression and But Fussion Method.				
a)	Butt Fussion Fitting/Jointing	P.joint	621.00	1314.00	
b)	Compression Fitting/Jointing	P.joint	567.60		
27-60	Supplying of G.I. pipe with flunch IIL or equivalent of approved make registered with PSQCA.				
a)	Light duty				
i)	1/2" (15 mm) inner dia.	R.M		406.56	
ii)	3/4" (20 mm) inner dia.	R.M		522.72	
iii)	1" (25 mm) inner dia.	R.M		811.80	
iv)	1.25" (30 mm) inner dia.	R.M		1040.16	
v)	1.5" (40 mm) inner dia.	R.M		1240.80	
vi)	2" (50 mm) inner dia.	R.M		1568.16	
vii)	2.5" (65 mm) inner dia.	R.M		2196.48	
viii)	3" (75 mm) inner dia.	R.M		2599.08	
ix)	4" (100 mm) inner dia.	R.M		2599.08	
b)	Medium duty				
i)	1/2" (15 mm) inner dia.	R.M		451.44	
ii)	3/4" (20 mm) inner dia.	R.M		638.88	
iii)	1" (25 mm) inner dia.	R.M		922.68	
iv)	1.25" (30 mm) inner dia.	R.M		1193.28	
v)	1.5" (40 mm) inner dia.	R.M		1524.60	
vi)	2" (50 mm) inner dia.	R.M		1945.68	
vii)	2.5" (65 mm) inner dia.	R.M		2740.32	
viii)	3" (75 mm) inner dia.	R.M		3190.44	
ix)	4" (100 mm) inner dia.	R.M		4560.60	
x)	5" (125 mm) inner dia.	R.M		6341.28	
xi)	6" (150 mm) inner dia.	R.M		7496.28	
27-61	laying, cutting, jointing, testing and disinfecting G.I. pipe line IIL or equivalent of approved make registered with PSQCA including the cost of specials i.e Nut & Bolts (S.S) and Rubber Gasket				
a)	Light duty				
i)	1/2" (15 mm) inner dia.	R.M	184.32	627.84	
ii)	3/4" (20 mm) inner dia.	R.M	184.32	754.56	
iii)	1" (25 mm) inner dia.	R.M	210.62	1096.22	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
iv)	1.25" (30 mm) inner dia.	R.M	210.62	1345.34	
v)	1.5" (40 mm) inner dia.	R.M	246.72	1600.32	
vi)	2" (50 mm) inner dia.	R.M	246.72	1957.44	
vii)	2.5" (65 mm) inner dia.	R.M	303.48	2699.64	
viii)	3" (75 mm) inner dia.	R.M	303.48	3138.84	
ix)	4" (100 mm) inner dia.	R.M	337.20	4531.92	
b)	Medium duty				
i)	1/2" (15 mm) inner dia.	R.M	184.32	676.80	
ii)	3/4" (20 mm) inner dia.	R.M	184.32	881.28	
iii)	1" (25 mm) inner dia.	R.M	210.62	1217.18	
iv)	1.25" (30 mm) inner dia.	R.M	210.62	1512.38	
v)	1.5" (40 mm) inner dia.	R.M	246.72	1909.92	
vi)	2" (50 mm) inner dia.	R.M	246.72	2369.28	
vii)	2.5" (65 mm) inner dia.	R.M	303.48	3292.92	
viii)	3" (75 mm) inner dia.	R.M	303.48	3783.96	
ix)	4" (100 mm) inner dia.	R.M	337.20	5312.40	
x)	5" (125 mm) inner dia.	R.M	415.32	7333.08	
xi)	6" (150 mm) inner dia.	R.M	415.32	8593.08	
27-62-1	Supplying MS strainer for tubewell bore hole of the nominal inner diameter.				
a)	2" MS Strainer 50 (3mm Thikness)	R.M		1007.35	
b)	3"MS Strainer 75 (3mm Thikness)	R.M		1582.63	
c)	4" MS Strainer 100 (3mm Thikness)	R.M		2108.95	
d)	5" MS Strainer 125 (3mm Thikness)	R.M		3068.57	
e)	6"MS Strainer 150 (3mm Thikness)	R.M		3687.91	
f)	7"MS Strainer 175 (3mm Thikness)	R.M		4314.60	
g-1)	8" MS Strainer 200 (3mm Thikness)	R.M		4314.60	
g-2)	8" MS Strainer 200 (3.5mm Thikness)	R.M		4937.62	
h)	9" MS Strainer 225 (3mm Thikness)	R.M		5604.70	
i-1)	10" MS Strainer 250 (3mm Thikness)	R.M		5936.40	
i-2)	10" MS Strainer 250 (3.5mm Thikness)	R.M		6232.61	
i-3)	10" MS Strainer 250 (4mm Thikness)	R.M		7095.53	
i-4)	10" MS Strainer 250 (4.5mm Thikness)	R.M		8011.08	
j-1)	12" MS Strainer 300 (4mm Thikness)	R.M		9498.24	
j-2)	12" MS Strainer 300 (4.5mm Thikness)	R.M		10404.00	
j-3)	12" MS Strainer 300 (5mm Thikness)	R.M		11444.40	
j-4)	12" MS Strainer 300 (6mm Thikness)	R.M		13464.00	
k)	15" MS Strainer 375 (6mm Thikness)	R.M		15300.00	
l)	18" MS Strainer 450 (6mm Thikness)	R.M		17931.60	
27-62-2	Supplying M.S. blind pipe of the nominal inner diameter.				
a)	2" MS Blind Pipe 50 mm dia (3 mm Thikness)	R.M		1244.81	
b)	3" MS Blind Pipe 75 mm dia (3 mm Thikness)	R.M		1866.60	
c)	4" MS Blind Pipe 100 mm dia (3 mm Thikness)	R.M		2489.62	
d)	5" MS Blind Pipe 125 mm dia (3 mm Thikness)	R.M		3171.38	
e)	6" MS Blind Pipe 150 mm dia (3 mm Thikness)	R.M		3813.98	
f)	7" MS Blind Pipe 175 mm dia (3mm Thikness)	R.M		5777.28	
g-1)	8" MS Blind Pipe 200 mm dia (3mm Thikness)	R.M		6182.42	
g-2)	8" MS Blind Pipe 200 mm dia (3.5mm Thikness)	R.M		7186.10	
h)	9" MS Blind Pipe 225 mm dia (3mm Thikness)	R.M		7588.80	
i-1)	10" MS Blind Pipe 250 mm dia (3mm Thikness)	R.M		7869.10	
i-2)	10" MS Blind Pipe 250 mm dia (3.5mm Thikness)	R.M		9153.07	
i-3)	10" MS Blind Pipe 250mm dia (4mm Thikness)	R.M		10438.27	
i-4)	10" MS Blind Pipe 250 mm dia (4.5mm Thikness)	R.M		11934.00	
j-1)	12" MS Blind Pipe 300 mm dia (4mm Thikness)	R.M		14504.40	
j-2)	12" MS Blind Pipe 300 mm dia (4.5mm Thikness)	R.M		15887.52	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
j-3)	12" MS Blind Pipe 300 mm dia (5mm Thikness)	R.M		16878.96	
j-4)	12" MS Blind Pipe 300 mm dia (6mm Thikness)	R.M		18139.68	
k)	15" MS Blind Pipe 375mm dia (3mm Thikness)	R.M		21530.16	
l)	18" MS Blind Pipe 450mm dia (3mm Thikness)	R.M		27637.92	
27-63	Installing MS strainer and MS Blind Pipe of the nominal inner diameter.				
a)	2" (50 mm) dia. and 5/32" (4 mm) wall thickness	R.M	78.12		
b)	3" (75 mm) dia. and 5/32" (4 mm) wall thickness	R.M	156.24		
c)	4" (100 mm) dia. and 3/16" (5 mm) wall thickness	R.M	156.24		
d)	5" (125 mm) dia. and 3/16" (5 mm) wall thickness	R.M	234.36		
e)	6" (150 mm) dia. and 3/16" (5 mm) wall thickness	R.M	234.36		
f)	7" (175 mm) dia. and 3/16" (5 mm) wall thickness	R.M	312.48		
g)	8" (200 mm) dia. and 3/16" (5 mm) wall thickness	R.M	312.48		
h)	9" (225 mm) dia. and 3/16" (5 mm) wall thickness	R.M	390.60		
i)	10" (250 mm) dia. with 3/16" (5 mm) wall thickness	R.M	390.60		
j)	12" (300 mm) dia. and 1/4" (6 mm) wall thickness	R.M	468.72		
k)	15" (375 mm) dia. and 1/4" (6 mm) wall thickness	R.M	468.72		
l)	18" (450 mm) dia. and 1/4" (6 mm) wall thickness	R.M	559.20		
27-64	Providing and fixing at Site Centrifugal Pump of KSB, Grandfos or approved equivalent (similar specifications), complete in all respects including all taxes				
a)	Centrifugal Pump with capacity 40 upto 200 gpm	Nos.	813.60	46413.60	
b)	Centrifugal Pump with capacity 50 upto 160 gpm	Nos.	813.60	48573.60	
c)	Centrifugal Pump with capacity 65 upto 200 gpm	Nos.	813.60	65733.60	
d)	Centrifugal Pump with capacity 32 upto 160 gpm	Nos.	813.60	38493.60	
e)	Centrifugal Pump with capacity 40 upto 250 gpm	Nos.	1627.20	84307.20	
f)	Centrifugal Pump with capacity 50 upto 200 gpm	Nos.	1627.20	57067.20	
g)	Centrifugal Pump with capacity 80 upto 200 gpm	Nos.	1627.20	76627.20	
27-65	Providing and fixing at Site Electric Motor of KSB, Grandfos, Siemens or approved equivalent (similar specifications), complete in all respects including all taxes.				
a)	Electric Motor 2 POLE (2950 RPM)				
i)	Electric Motor, I Hp	Nos.	363.60	17763.60	
ii)	Electric Motor, 2 Hp	Nos.	363.60	23163.60	
iii)	Electric Motor, 3 Hp	Nos.	363.60	31563.60	
iv)	Electric Motor, 5.5 Hp	Nos.	727.20	49927.20	
v)	Electric Motor, 7.5 Hp	Nos.	727.20	65527.20	
vi)	Electric Motor, 10 Hp	Nos.	727.20	82327.20	
vii)	Electric Motor, 15 Hp	Nos.	1090.80	111490.80	
viii)	Electric Motor, 20 Hp	Nos.	1090.80	123490.80	
ix)	Electric Motor, 25 Hp	Nos.	1090.80	199090.80	
x)	Electric Motor, 30 Hp	Nos.	1347.60	235347.60	
xi)	Electric Motor, 40 Hp	Nos.	1347.60	313347.60	
xii)	Electric Motor, 50 Hp	Nos.	1347.60	379347.60	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
xiii)	Electric Motor, 60 Hp	Nos.	1604.40	469604.40	
xiv)	Electric Motor, 75 Hp	Nos.	1604.40	577604.40	
xv)	Electric Motor, 100 Hp	Nos.	1604.40	829604.40	
xvi)	Electric Motor, 120 Hp	Nos.	2181.60	1058181.60	
xvii)	Electric Motor, 147 Hp	Nos.	2181.60	1382181.60	
xviii)	Electric Motor, 177 Hp	Nos.	2181.60	1562181.60	
xix)	Electric Motor, 215 Hp	Nos.	2908.80	2222908.80	
xx)	Electric Motor, 268 Hp	Nos.	2908.80	2882908.80	
xxi)	Electric Motor, 355 Hp	Nos.	2908.80	4082908.80	
b)	Electric Motor 4 POLE (1450 RPM)				
i)	Electric Motor, I Hp	Nos.	363.60	20163.60	
ii)	Electric Motor, 2 Hp	Nos.	363.60	26763.60	
iii)	Electric Motor, 3 Hp	Nos.	363.60	36363.60	
iv)	Electric Motor, 5.5 Hp	Nos.	727.20	54727.20	
v)	Electric Motor, 7.5 Hp	Nos.	727.20	70327.20	
vi)	Electric Motor, 10 Hp	Nos.	727.20	89527.20	
vii)	Electric Motor, 15 Hp	Nos.	1090.80	127090.80	
viii)	Electric Motor, 20 Hp	Nos.	1090.80	142690.80	
ix)	Electric Motor, 25 Hp	Nos.	1090.80	223090.80	
x)	Electric Motor, 30 Hp	Nos.	1347.60	265347.60	
xi)	Electric Motor, 40 Hp	Nos.	1347.60	343347.60	
xii)	Electric Motor, 50 Hp	Nos.	1347.60	421347.60	
xiii)	Electric Motor, 60 Hp	Nos.	1604.40	529604.40	
xiv)	Electric Motor, 75 Hp	Nos.	1604.40	649604.40	
xv)	Electric Motor, 100 Hp	Nos.	1604.40	937604.40	
xvi)	Electric Motor, 120 Hp	Nos.	2181.60	1142181.60	
xvii)	Electric Motor, 147 Hp	Nos.	2181.60	1502181.60	
xviii)	Electric Motor, 177 Hp	Nos.	2181.60	1862181.60	
xix)	Electric Motor, 215 Hp	Nos.	2908.80	2342908.80	
xx)	Electric Motor, 268 Hp	Nos.	2908.80	3122908.80	
xxi)	Electric Motor, 355 Hp	Nos.	2908.80	4502908.80	
c)	Electric Motor 6 POLE (950 RPM)				
i)	Electric Motor, I Hp	Nos.	363.60	39363.60	
ii)	Electric Motor, 2 Hp	Nos.	363.60	53163.60	
iii)	Electric Motor, 3 Hp	Nos.	363.60	68163.60	
iv)	Electric Motor, 5.5 Hp	Nos.	727.20	94327.20	
v)	Electric Motor, 7.5 Hp	Nos.	727.20	114727.20	
vi)	Electric Motor, 10 Hp	Nos.	727.20	154327.20	
vii)	Electric Motor, 15 Hp	Nos.	1090.80	223090.80	
viii)	Electric Motor, 20 Hp	Nos.	1090.80	295090.80	
ix)	Electric Motor, 25 Hp	Nos.	1090.80	379090.80	
x)	Electric Motor, 30 Hp	Nos.	1347.60	457347.60	
xi)	Electric Motor, 40 Hp	Nos.	1347.60	595347.60	
xii)	Electric Motor, 50 Hp	Nos.	1347.60	751347.60	
xiii)	Electric Motor, 60 Hp	Nos.	1604.40	937604.40	
xiv)	Electric Motor, 75 Hp	Nos.	1604.40	1183604.40	
xv)	Electric Motor, 100 Hp	Nos.	1604.40	1621604.40	
xvi)	Electric Motor, 120 Hp	Nos.	2181.60	2018181.60	
xvii)	Electric Motor, 147 Hp	Nos.	2181.60	2582181.60	
xviii)	Electric Motor, 177 Hp	Nos.	2181.60	3422181.60	
xix)	Electric Motor, 215 Hp	Nos.	2908.80	4382908.80	
xx)	Electric Motor, 268 Hp	Nos.	2908.80	5822908.80	
xxi)	Electric Motor, 355 Hp	Nos.	2908.80	8342908.80	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
27-66	Providing and fixing at Site Mono Block PumpSet of Meco or approved equivalent (similar specifications), complete in all respects including all taxes				
a)	Mono Block PumpSet, 4HP	Nos.	727.20	66727.20	
b)	Mono Block PumpSet, 5HP	Nos.	727.20	82327.20	
c)	Mono Block PumpSet, 7.5HP	Nos.	1240.80	127240.80	
d)	Mono Block PumpSet, 10HP	Nos.	1454.40	151454.40	
e)	Mono Block PumpSet, 15HP	Nos.	2181.60	224181.60	
27-67	Providing and fixing at Site of Submersible Pumpset of KSB, Alarko, Grandfos or approved equivalent (similar specifications), complete in all respects including all taxes.				
a)	Submersible PumpSet, 4HP	Nos.	2654.40	84254.40	
b)	Submersible PumpSet, 5HP	Nos.	2654.40	101054.40	
c)	Submersible PumpSet, 7.5HP	Nos.	2654.40	164654.40	
d)	Submersible PumpSet, 10HP	Nos.	5308.80	203308.80	
e)	Submersible PumpSet, 12.5HP	Nos.	5308.80	251308.80	
f)	Submersible PumpSet, 15HP	Nos.	5308.80	299308.80	
g)	Submersible PumpSet, 17.5HP	Nos.	5308.80	347308.80	
h)	Submersible PumpSet, 20HP	Nos.	5308.80	389308.80	
i)	Submersible PumpSet, 25HP	Nos.	6636.00	498636.00	
j)	Submersible PumpSet, 30HP	Nos.	6636.00	594636.00	
k)	Submersible PumpSet, 40HP	Nos.	6636.00	780636.00	
27-68	Providing and fixing at Site Motor Control Panel of Golden,SM Power/SCS or approved equivalent (similar specifications), complete in all respects including all taxes.				
a)	Motor Control Panel, 3HP	Nos.	363.60	22719.60	
b)	Motor Control Panel, 5.5HP	Nos.	620.40	26996.40	
c)	Motor Control Panel, 10HP	Nos.	877.20	43765.20	
d)	Motor Control Panel, 15HP	Nos.	877.20	43915.20	
e)	Motor Control Panel, 20HP	Nos.	1134.00	62892.00	
f)	Motor Control Panel, 25HP	Nos.	1240.80	74278.80	
g)	Motor Control Panel, 30HP	Nos.	1454.40	74492.40	
h)	Motor Control Panel, 40HP	Nos.	1604.40	92882.40	
i)	Motor Control Panel, 60HP	Nos.	1861.20	201769.20	
27-69	Providing and fixing at Site Diesel Engineer of Chief, KAM or approved equivalent (similar specifications), complete in all respects including all taxes.				
a)	Diesel Engine, 6 HP	Nos.	727.20	63127.20	
b)	Diesel Engine, 8 HP	Nos.	1754.40	77354.40	
c)	Diesel Engine, 10 HP	Nos.	2481.60	100881.60	
d)	Diesel Engine, 16 HP	Nos.	3336.00	177336.00	
e)	Diesel Engine, 20 HP	Nos.	4963.20	214963.20	
f)	Diesel Engine, 25HP	Nos.	8726.40	236726.40	
g)	Diesel Engine, 30HP	Nos.	14889.60	284889.60	
h)	Diesel Engine, 32HP	Nos.	17452.80	323452.80	
i)	Diesel Engine, 36HP	Nos.	17452.80	371452.80	
j)	Extra of Self Start Accessories with Battery (125 Amper)	Nos.	363.60	36363.60	
k)	Extra of Base Plate and Coupling for Diesel Engine including Belts and Brackets	Nos.	727.20	25927.20	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
27-70	Providing and fixing at Site Submersible Pumpset including Motor of KSB, Komax, Grandfos or approved equivalent (similar specifications), complete in all respects including all taxes.				
a)	Minimium Flow rate of 30 m3/h, 4 HP, 6" DOL Type, 50 Hz, 2.98 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 4 Stages , Discharge:- 92 GPM and Head:- 154 Feet	Each	2654.40	84254.40	
b)	Minimium Flow rate of 30 m3/h, 5.5 HP, 6" DOL Type, 50 Hz, 4 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 4 Stages , Discharge:- 92 GPM and Head:- 154 Feet	Each	2654.40	105854.40	
c)	Minimium Flow rate of 35 m3/h, 7.5 HP, 6" DOL Type, 50 Hz, 5.5 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 200 Feet	Each	2654.40	164654.40	
d)	Minimium Flow rate of 40 m3/h, 10 HP, 6" DOL Type, 50 Hz, 7.5 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 282 Feet	Each	2654.40	200654.40	
e)	Minimium Flow rate of 50 m3/h, 12.5 HP, 6" DOL Type, 50 Hz, 9.3 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 282 Feet	Each	2654.40	248654.40	
f)	Minimium Flow rate of 50 m3/h, 15 HP, 6" DOL Type, 50 Hz, 11 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 413 Feet	Each	2654.40	296654.40	
g)	Minimium Flow rate of 70 m3/h, 20 HP, 6" DOL Type, 50 Hz, 15 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 567 Feet	Each	2654.40	386654.40	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
h)	Minimium Flow rate of 80 m3/h, 25 HP, 6" DOL Type, 50 Hz, 18.5 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 700 Feet	Each	2654.40	494654.40	
i)	Minimium Flow rate of 110 m3/h, 30 HP, 6" DOL Type, 50 Hz, 22 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 850 Feet	Each	2654.40	590654.40	
j)	Minimium Flow rate of 130 m3/h, 35 HP, 6" DOL Type, 50 Hz, 26 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 1000 Feet	Each	2654.40	698654.40	
k)	Minimium Flow rate of 150 m3/h, 40 HP, 6" DOL Type, 50 Hz, 30 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 1100 Feet	Each	2654.40	776654.40	
l)	Minimium Flow rate of 180 m3/h, 50 HP, 6" DOL Type, 50 Hz, 37KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 950 Feet	Each	2654.40	950654.40	
m)	Minimium Flow rate of 220 m3/h, 60 HP, 6" DOL Type, 50 Hz, 45 KW, Three Phase, Water Cool, Rewind able, Stainless Steel Body, Double insulated Copper Wire, 380-420 V, Automatic Star Delta Connection and Setting Depth of 18 m, 8 Stages , Discharge:- 92 GPM and Head:- 1007 Feet	Each	2654.40	1154654.40	
27-71	Providing and fixing at Site Deep Well Turbine Pump Flanged Type of KSB, Grandfos or approved equivalent (similar specifications), complete in all respects including all taxes.				
a)	Minimium Flow rate of 50 m3/h, Head of 46 m and Setting Depth of 18m, 8 Stages + 15HP / 4P Motor	Each	2654.40	332654.40	
b)	Minimium Flow rate of 70 m3/h, Head of 46 m and Setting Depth of 18m, 10 Stages + 20HP / 4P Motor	Each	2654.40	476654.40	
c)	Minimium Flow rate of 110 m3/h, Head of 47 m and Setting Depth of 18m, 5 Stages + 30 HP / 4P Motor	Each	2654.40	224654.40	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
d)	Minimium Flow rate of 75 m3/h, Head of 61 m and Setting Depth of 46m, 14 Stages + 30 HP / 4P Motor	Each	2654.40	764654.40	
e)	Minimium Flow rate of 220 m3/h, Head of 50 m and Setting Depth of 46 m, 4 Stages + 60 HP / 4P Motor	Each	2654.40	458654.40	
27-72	Providing and fixing at Site Starter Switch of Siemens, KSB, Grandfos or approved equivalent (similar specifications), complete in all respects including all taxes.				
a)	For 10 HP Motor	Each	406.80	22006.80	
b)	For 15 HP Motor	Each	406.80	22006.80	
c)	For 20 HP Motor	Each	813.60	39213.60	
d)	For 25 HP Motor	Each	813.60	51213.60	
e)	For 30 HP Motor	Each	1220.40	67220.40	
f)	For 40 HP Motor	Each	1220.40	94820.40	
g)	For 60 HP Motor	Each	1627.20	139627.20	
27-73	Providing and fixing at Site Motor Contorol Unite (MCU) including relays for under/over load, dry run and time relay, Phase Saftey and Starter Switch of Siemens, KSB, Grandfos or approved equivalent (similar specifications), complete in all respects including all taxes.				
a)	For 10 HP / 15 HP Motor	Each	813.60	38013.60	
b)	For 20 HP / 25 HP Motor	Each	1017.00	47217.00	
c)	For 30 HP / 35 HP Motor	Each	1220.40	60020.40	
d)	For 40 HP / 60 HP Motor	Each	1627.20	71227.20	

SECTION – 28

IRON, STEEL AND ALUMINUM WORKS

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
28-1	Providing and fixing hot dipped galvanized fully glazed steel door with frame single leaf galvanized steel bottom or kick rail 6" (150mm) wide and top rail 4" (100mm), width of Z-section 1.25" (30mm) at each edge using approved brass section oxidized fittings, iron lugs, including cutting holes galvanizing and cost of fabrication and making good the damages to walls.	Sq.m	3934.25	18823.36	
28-2	Description same as in Item No. 28-1-1 but with double leaf fully glazed door with frame	Sq.m	3518.75	15127.22	
28-3	Providing and fixing fully glazed steel door with frame single leaf with M.S bottom or kick rail 6" (150mm) wide and top rail of 4" (100mm) wide painted with two coats of red oxide paint, brass oxidized fittings of lugs, cutting holed, andmaking good the damages to walls.	Sq.m	3934.25	15097.32	
28-4	Description same as in Item No. 28-3-1 but with double leaf fully glazed door with frame.	Sq.m	3518.75	10434.63	
28-5	Providing and fixing single leaf steel door with frame fully panelled with M.S sheet 16 gauge (1.59mm) painted with two coats of red oxide paint with brass fitting of approved make including cost of fabrication, iron lugs, cutting holes and making good the damages to walls.	Sq.m	542.29	1792.38	
28-6	Description same as in Item No. 28-5-1 but with double leaf door with frame	Sq.m	3195.40	11495.25	
28-7	Providing and fixing hot dipped Galvanised single leaf steel door with 2" x 2" x 1/4" frame fully panelled with 16 gauge (1.59mm) G.I. sheet with brass fitting of approved make including cost of fabrication, iron lugs, cutting holes and making good the damages to walls.	Sq.m	542.29	1715.30	
28-8	Description same as in Item No. 28-7-1 but with double leaf door with frame	Sq.m	3195.40	9630.76	
28-9	Description same as in Item No. 28-7-1 but with 2" x 2" x 1/4" frame partly glazed (using 5mm glass sheet) and partly panelled with G.I sheet of approved section	Sq.m	4050.68	14188.56	
28-10	Description same as in Item No. 28-9-1 but with frame 2.5" x 2" x 1/4" partly and partly panelled with G.I. sheet	Sq.m	3643.72	15120.65	
28-11	Description same as in item 28-5-1 but with frame (1.5"x1.5"x1/4") partly glazed (using 5mm glass sheet) and partly panelled of approved section with M.S. plate.	Sq.m	4050.68	11786.93	
28-12	Description same as in item 28-6 but with frame (1.5"x1.5"x1/4") partly glazed (using 5mm glass sheet) and partly panelled of approved section with M.S. plate.	Sq.m	3643.72	12656.31	
28-13	Providing and fixing M.S. sheet shutters with 2" x 2" x 1/4"angle iron frame as diagonal braces, gun metal roller and pulleys, angle iron top guides fixed to T-iron bottom track fixed in cement concrete 1:2:4 with rag bolts including locking arrangement and handles as per design and instructions of the Engineer incharge.	Sq.m	3848.28	21965.61	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
28-14	Description same as in Item No. 28-13-1 but with G.I. corrugated sheet shutters.	Sq.m	4028.54	18829.67	
28-15	Providing and fixing 18 guage (1.41 mm) G.I. sheet pipe shaft 2" (50 mm) dia. with laths, 1/8" (3 mm) guide channel, 2" x 22" x 1") rolling shutter with all accessories and fittings encased in G.I. sheet hose with brackets including arrangement for inside and outside locking with operation handles cutting holes, painting with two coats of red oxide paint on M.S sections and making good the damage to walls as per design and instructions of the Engineer Incharge.	Kg	109.08	660.21	
28-16	Providing and fixing rolling shutters of 1/2" dia. M.S. bars mesh 4" x 4" with all accessories and fittings encased in G.I. box with brackets, arrangement for inside and outside locking with operation handles, cutting holes, painting two coats of red oxide paint on M.S. section and making good the damages to walls as per instructions of Engineer Incharge.	Kg	109.08	581.25	
28-17	Providing and fixing collapsible steel shutter or gate with vertical channels, flat iron diagonal, top and bottom rail with steel rollers of required size, T-iron bottom track riveting the junctions, including locking arrangement and handles, cutting holes, painting two coats of red oxide paint, fixing bottom track with cement concrete 1:2:4 and making good the damages to walls fabrication as designed and erection as per instructions of the Engineer Incharge.	Sq.m	1239.02	7953.78	
28-18	Providing and fixing steel gate of flat iron sections of approved design with or without M.S. sheet covering including hold fast with or without roller and track arrangement including providing wicket shutter of required size with all accessories and locking arrangement as per direction of the Engineer Incharge.	Sq.m	109.75	918.38	
28-19	Providing and fixing hot dipped galvanized fully glazed fixed steel sky light of Z section 1.25" (32.5 mm) width or as approved by Engineer incharge including iron lugs, cutting holes and making good the damages to walls.	Sq.m	2466.19	10959.01	
28-20	Providing and fixing hot dipped galvanized fully glazed single leaf hung steel windows and ventilators of approved section with Z-section 1.25" (32mm) width at each edge including using approved brass sections oxidized fittings, iron lugs, cutting holes and making good the damages to walls.	Sq.m	2466.19	15827.14	
28-21	Providing and fixing hot dipped galvanized fully glazed double leaf hung steel windows and ventilators of approved section with Z-section 1.25" (32 mm) width at each edge including using approved brass sections oxidized fitting, iron lugs, cutting holes and making good the damages to walls.	Sq.m	1438.61	15204.35	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
28-22	Providing and fixing hot dipped galvanized fully glazed partly fixed and partly hung steel windows and ventilators with Z-section 1.25" (32 mm) width or as approved by Engineer incharge including using approved brass section oxidized fittings, iron lugs, cutting holes and making good the damages to walls	Sq.m	1438.61	11884.89	
28-23	Providing and fixing fully glazed fixed aluminium sky light of economy section 1.3 mm. or as approved by Engineer incharge including lugs, cutting holes and making good the damages to walls.	Sq.m	1438.61	10471.19	
28-24	Providing and fixing fully glazed single leaf hung/sliding aluminium windows, ventilators (Deluxe model - 1.6mm) of anodized champagne or approved color of Prime, Chawala, Pakistan Cable or any approved section as approved by Engineer incharge including aluminium fittings, 5 mm local tinted glass, lugs, cutting holes and making good the damages to walls.	Sq.m	1438.61	15015.57	
28-25	Providing and fixing fully glazed fixed aluminium windows, ventilators (Deluxe model - 1.6mm) of anodized champagne or approved color of Alcop, Pakistan Cable or any approved section as approved by Engineer incharge including aluminium fittings, local tinted glass, lugs, cutting holes and making good the damages to walls.	Sq.m	1438.61	13091.68	
28-26 a)	Providing and fixing fully glazed partly fixed and partly hung or sliding aluminium windows (Deluxe model - 1.6mm) of anodized champagne or approved color of Prime, Chawal, Alcop, Pakistan Cable or any approved section as approved by Engineer Incharge including aluminium fittings, local tinted glass, lugs, cutting holes and making good the damages to walls.	Sq.m	1438.61	11264.75	
b)	Providing and fixing fixed or sliding fibre wire gauze in aluminium frame as approved by Engineer incharge including aluminium fittings etc.	Sq.m	1438.61	8469.20	
28-27	Providing and fixing iron grills as per approved design including welding all sides of the section at the junction and fixing with sunk iron screws, painting with two coats of red oxide paint and fixing in masonry/concrete or wood	Kg	52.88	347.59	
28-28	Providing and fixing iron grills with square bars of 3/8" size as per approved design including welding all sides of the section at the junction and fixing with sunk iron screws, painting with two coats of red oxide paint and fixing in masonry/concrete or wood	Sq.m	569.00	5234.54	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
28-29	Providing and fixing iron bars of required dia at required spacing with horizontal flat iron as per approved design including making holes fixing with sunk iron screws, painting with two coats of red oxide paint.	Sq.m	1703.09	4720.25	
28-30	Providing and fixing with iron screws holdfasts of flat iron bifurcated at one end as per approved design and size including painting with black bitumastic paint two coats including the cost of embedding with cement concrete 1:2:4 and curing but excluding the cost of cement concrete	Kg	354.75	581.48	
28-31	Providing and fixing mild steel anchor or holding down bolts with nuts and washers, welded with M.S. plates if required including painting two coats of black bitumastic paint but excluding the cost of cement concrete.	Kg	136.29	554.33	
28-32	Providing rolled steel joists and channels including hoisting and fixing in position in cement concrete but excluding the cost of cement concrete.	Kg	6.46	418.01	
28-33	Providing M.S. Tees, angles and flats including fixing in position.	Kg	62.83	390.44	
28-34	Providing and fixing R.S. joists and channels including riveting, guesset plates, nuts with hoisting and erecting in position in steel trusses, frame and towers of any approved design.	Kg	94.12	509.28	
28-35	Providing and fixing M.S. Tees, angles and flat including riveting, fixing with gusset plates, bolts, hoisting and erecting in position in steel trusses, frames and towers of any approved design.	Kg	91.44	409.97	
28-36	Providing and fixing R.S. joists and channels including welding all the sides of the sections at the junction, gusset plates, bolts, nuts, hoisting and erecting in position in steel trusses and towers of approved design.	Kg	83.34	388.77	
28-37	Providing and fixing M.S. ties, angles, and flats including welding of all sides of the section at the junction, gusset plates, bolts, nuts, hoisting and erecting in position in steel trusses, frame and towers of approved design.	Kg	83.41	509.02	
28-38	Welding by gas plant upto 10 ft. (3 m.) height from ground level.	per cm	3.30	47.10	
28-39	Welding by Electric plant upto 10 ft. (3 m.) height from ground level.	per cm	7.20	41.47	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
28-40	Providing and fixing moulded steel door frame of approved profile, manufactured from zinc-coated mild steel sheets 16 gauge made by Shahah Industries or equivalent standard conforming to B.S.S.1245, treated with special primer base paint all round, fitted with six fixing lugs, three steel hinges for fixing door shutters standard lock-strike plate, one sliding holt eye, and three rubber buffers, including cutting holes and making good damages to walls and filling the door frame cavity with lean cement mortar 1:4 as directed by the Engineer Incharge.	R.M			
a)	4.5''-5" (113.5mm-125 mm) size	R.M	187.24	1361.32	
b)	8''-10" (200mm-250 mm) size	R.M	280.85	2001.43	
c)	Item same as above except moulded steel door frame manufactured from zinc coated mild steel 18 gauge sheets instead of 16 gauge				
i)	4.5''-5" (113.5mm-125 mm) size	R.M	187.24	1282.57	
ii)	8''-10" (200mm-250 mm) size	R.M	280.85	1809.28	
iii)	12''-14" (300mm-350 mm) size	R.M	280.85	2006.14	
28-41	Providing and fixing fully glazed Aluminium swing doors 2.0mm of anodized Shampane or approved color (12 microns) or any approved section including Aluminium fittings, hungs, cutting holes and making good damages to walls.	Sq.m	3518.75	23819.76	
28-42	Providing and fixing fully glazed Aluminium sliding doors 1.6mm of anodized Shampane (12 microns) or approved color including Aluminium fittings, hungs, cutting holes and making good damages to walls.	Sq.m	3518.75	22551.62	
28-43	Providing and fixing fully glazed aluminium sliding doors (Deluxe model- 1.6mm) of anodized Shampane or approved color of Alcop, Pakistan Cable or any approved section including Aluminium fittings, hungs, cutting holes and making good damages to walls.	Sq.m	3518.75	27571.96	
28-44	Small iron work such as gusset plates knees, bends, stirrups, straps, rings including cutting, drilling, rivetting, handling assembling etc. but excluding erection in position.	Kg	91.44	382.97	
28-45	Fabrication of heavy steel work with angle, tees, flat iron, round iron and sheet iron for making trusses, girders, tanks etc. including cutting, drilling riveting, handling, assembling and fixing but excluding erection in position.	Kg	94.12	336.62	
28-46	Erection and fixing in position iron trusses and staging of water tank.	Kg		6.80	
28-47	Providing and fixing steel grated single leaf door with locking arrangement, angle iron 2" x 2" x 3/8" frame, middle strip, 1/4" thick gusset plate 3" x 3" at each edge and 3/4" M.S square or round bars at 4" c/c including two coats of red oxide paint.				
a)	M.S. sq. bars 3/4" (19 mm) size.	Sq.m	4757.52	27832.84	
b)	M.S round bars 3/4" (19 mm) dia	Sq.m	4757.52	24551.34	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
28-48	Providing and fixing steel grated double leaf door with locking arrangement, angle iron 2"x2"x3/8" frame, middle strip, 1/4" thick gusset plate 3" x 3" at each edge and 3/4" M.S square or round bars at 4" c/c including two coats of red oxide paint.				
a)	M.S. sq. bars 3/4" (19 mm) size.	Sq.m	4542.26	31049.23	
b)	M.S round bars 3/4" (19 mm) dia	Sq.m	4542.26	27613.99	
28-49	Providing and fixing steel grated single leaf door with 1/16" (1.6mm) thick M.S. sheeting and locking arrangement, angle iron 2"x2"x3/8" frame, middle strip, 1/4" thick gusset plate 3"x3" at each edge and 3/4" M.S square or round bars at 4" c/c including two coats of red oxide paint.				
a)	M.S. sq. bars 3/4" (19 mm) size.	Sq.m	4934.97	33204.77	
b)	M.S round bars 3/4" (19 mm) dia	Sq.m	4934.97	29390.53	
28-50	Providing and fixing steel grated double leaf door with M.S. 1/16" (1.6mm) thick sheet and locking arrangement, angle iron 2"x2"x3/8" frame, middle strip, 1/4" thick gusset plate 3"x3" at each edge and 3/4" M.S square or round bars at 4" c/c including two coats of red oxide paint.				
a)	M.S. sq. bars 3/4" (19 mm) size.	Sq.m	4723.03	36868.33	
b)	M.S round bars 3/4" (19 mm) dia	Sq.m	4723.03	33847.43	
28-51	Providing and fixing iron grating in opening with flat iron 2" x 3/8" frame and 3/4" M.S. square or round bars placed at 4" c/c including two coats of black Japan paint.				
a)	M.S. sq. bars 3/4" (19 mm) size.	Sq.m	2510.31	13914.03	
b)	M.S round bars 3/4" (19 mm) dia	Sq.m	2510.31	11697.96	
28-52	Providing and fixing iron grating for fire place with flat iron 2" x 1/4" frame and 1/2" M.S. square or round bars placed at 6" c/c including two coats of black Japan paint.				
a)	M.S. sq. bars 1/2" (12 mm) size	Sq.m	1725.00	9115.29	
b)	M.S round bars 1/2" (12 mm) dia	Sq.m	1725.00	8312.75	
28-53	Providing and fixing stair railing of 3" (75mm) size of all types and design of shesham wood or similar including bends and corners, screwed to 5/8" (16mm) square or round bars, 2.75 ft (0.84m) high, 5.5" (140mm) c/c in steps including welding of M.S. flat 1"x1/8" to bars and three coats of painting and polishing				
a)	M.S. sq. bars 5/8" (16 mm) size	R.M	1463.69	8179.16	
b)	M.S round bars 5/8" (16 mm) dia	R.M	1463.69	7292.40	
28-54	Providing and fixing terrace railing of 2" (50mm) internal dia steel pipe welded with square or round bars 2.75 ft high at 5" c/c and embedded in reinforced cement concrete as per design and drawing including cost of cement mortar 1:4 and two coats of paint.				
a)	M.S. sq. bars 5/8" (16 mm) size	R.M	1129.19	8209.02	
b)	M.S round bars 5/8" (16 mm) dia	R.M	1129.19	3892.13	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
28-55	Providing and fixing stair railing of 2.5" (65mm) internal dia steel pipe welded with bars 6" c/c and embeded in reinforced cement concrete steps as per design and drawing including cost of cement mortar 1:4 and two coats of paint.				
a)	M.S. sq. bars 5/8" (16 mm) size	R.M	578.61	7075.04	
b)	M.S round bars 5/8" (16 mm) dia	R.M	578.61	6261.55	
28-56	Providing and fixing M.S angle iron 1/1/2" x1/1/2" x1/4" edge protector nozing for steps of stairs having hold fast of 1/4" dia M.S. bars 6" long welded at 10" c/c or 3 Nos. in each step and embeded in cement concrete on steps.	R.M	245.83	1070.50	
28-57	Providing and fixing G.I. wire gauze 24 SWG (1.06mm), 2.1mm x 2.1mm mesh fixed with flat iron 1/2"x1/8" at 15" c/c and screwed at 6" c/c to steel windows, doors and grill including painting.	Sq.m	765.35	5931.12	
28-58	Providing & fixing steel windows with openable glazed panels using beam section for frame 1.5"x1"x5/8"x1/8" z-section for leave 3/4"x1"x3/4"x1/8" T-section sashes 1"x1"x1/8 " glass panes, wooden screws for glazing embedded over a thin layer of putty duty screwed with leave with fittings of approved make including cost of painting, hold fast, fabrication, cutting holes as per approved design.				
a)	Without wire gauze				
i)	With glass 3 mm thick	Sq.m	2072.05	13276.56	
ii)	With glass 5 mm thick	Sq.m	2072.05	13600.37	
iii)	With glass 6 mm thick	Sq.m	2072.05	13753.41	
b)	With G.I. wire gauze 22 gauge - 12 mesh				
i)	Glass 3 mm thick	Sq.m	2611.55	19115.60	
ii)	Glass 5 mm thick	Sq.m	2611.55	19439.42	
iii)	Glass pane 6 mm thick	Sq.m	2611.55	19592.45	
28-59	Providing and fixing angle iron railing using 2.5"x 2.5"x 3/8" angle iron post 5 ft long and 5 ft. apart with 2.5"x 2.5"x 3/8" angle iron top railing and two rows of M.S. flat 2.5"x 1/4" including fixing side of bridge/structure with 3/4" dia. U bolts and painting.	R.M	641.88	8125.72	
28-60	Providing and fixing barbed wire fencing comprising 1.5"x 1.5"x 3/16" angle iron post 3 ft long, 4 ft c/c embeded in cement concrete 1:4:8 base of 9"x 9"x 12" size with three rows of barbed wire 6" c/c including binding wire and painting of posts.				
a)	Barbed wire 2 ply, 14 guage (1.8 mm) thick	R.M	140.99	976.69	
b)	Barbed wire 3 ply, 12 gauge (2.17 mm) thick	R.M	140.99	976.69	
28-61	Providing and fixing barbed wire fencing around compound wall comprising 1.5"x 1.5"x 3/16" angle iron posts 3 ft long and 4ft apart embedded in cement concrete 1:4:8 base of 6"x 6"x 9" size and 4 rows of 2 ply, 14 gauge barbed wire 6" c/c including binding wire and painting of posts.	R.M	145.16	1021.63	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
28-62	Providing and fixing barbed wire fencing with 4 horizontal and 2 cross wires with R.C.C. posts 5'- 6"x 6"x 9", 8.25 ft c/c reinforced with 4 No. 3/8" dia. vertical bars and 1/8" dia. stirrups at 12" c/c.				
a)	Without cement concrete base				
i)	Barbed wire 2 ply, 14 guage (1.8 mm) thick	R.M	294.74	1255.12	
ii)	Barbed wire 3 ply, 14 gauge (1.8 mm) thick	R.M	294.74	1353.00	
iii)	Barbed wire 2 ply, 12 gauge (2.17 mm) thick	R.M	294.74	1295.38	
iv)	Barbed wire 3 ply, 12 gauge (2.17 mm) thick	R.M	294.74	1413.38	
b)	With 1 : 4 : 8 cement concrete base of 12" x12" x 21" size				
i)	Barbed wire 2 ply, 14 guage (1.8 mm) thick	R.M	294.74	1295.50	
ii)	Barbed wire 3 ply, 14 gauge (1.8 mm) thick	R.M	294.74	1393.37	
iii)	Barbed wire 2 ply, 12 gauge (2.17 mm) thick	R.M	294.74	1335.75	
iv)	Barbed wire 3 ply, 12 gauge (2.17 mm) thick	R.M	294.74	1453.76	
28-63	Providing and fixing barbed wire fencing with 4 horizontal and 2 cross wires fixed with 7'x9"x9" R.C.C.1:2:4 posts at 100 ft (30m) c/c, stiffening posts 7'x6"x6" at 50 ft (15m) interval and intermediate post 7'x5"x5" at 8.25 ft (2.5m) vertical bars in straining and sifftening posts to be 4 Nos. 3/8" dia, stirrups for all posts to be 1/4" dia at at 12" c/c including cost of eye bolts, washers and steel reinforcement and its fabrication and placing.				
a)	Without cement concrete base				
i)	Barbed wire 2 ply, 14 guage (1.8 mm) thick	R.M	365.77	1817.05	
ii)	Barbed wire 3 ply, 14 gauge (1.8 mm) thick	R.M	365.77	1922.03	
iii)	Barbed wire 2 ply, 12 gauge (2.17 mm) thick	R.M	365.77	1860.23	
iv)	Barbed wire 3 ply, 12 gauge (2.17 mm) thick	R.M	365.77	1986.81	
b)	With 1 : 4 : 8 cement concrete base of 12" x12" x 21" size				
i)	Barbed wire 2 ply, 14 guage (1.8 mm) thick	R.M	365.77	2144.44	
ii)	Barbed wire 3 ply, 14 gauge (1.8 mm) thick	R.M	365.77	2249.42	
iii)	Barbed wire 2 ply, 12 gauge (2.17 mm) thick	R.M	365.77	2187.63	
iv)	Barbed wire 3 ply, 12 gauge (2.17 mm) thick	R.M	365.77	2314.21	
28-64	Providing and fixing steel windows with openable glazed pannels using 2"x 1.5" x1/8" M.S pipe for frame, 3/4"x1"x3/4"x1/8" Z section for leaves, 1"x1"x1/8" T-section sashes. The cost of wire gauze, glass panes and painting is not included.	Sq.m	1399.88	14180.70	
28-65	Extra on all aluminium works on respective items if powdered coated colored aluminium is used	%		7.5%	
28-66	Steel work in built up tubular trusses including cutting, hoisting fixing in position and applying a priming coat of approved steel primer, welded and bolted including special shaped washers etc. complete in all respect as directed by the Engineer Incharge.				
a)	Hot finished welded type tubes	Kg	85.26	190.92	
b)	Hot finished seamless type tubes	Kg	85.26	210.01	
28-67	Add extra for respective payable item above ground floor				
a)	For first floor	%		10.0%	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	For every additional floor above first floor	%		7.5%	
28-68	Provide and fix balli fencing posts embedded in concrete and coaltaring embedded portion but excluding the cost of excavation and concrete.				
a)	4" (100 mm) dia.	R.M	39.77	222.19	
b)	3" (75 mm) dia.	R.M		194.63	
28-69	Providing and fixing brass grill railing of approved pattern and design including fixing with brass screws and polishing.	Kg	86.76	2372.90	
28-70	Providing and fixing aluminium angle in corners with rawl plugs and aluminium screws.				
a)	1" x 1" x 1/8" size	R.M	103.52	417.02	
b)	1.5" x 1.5" x 1/8" size	R.M	103.52	670.23	
28-71	Providing and fixing aluminium strip with aluminium screws.				
a)	1" x 1/8" size strip	R.M	51.76	416.93	
b)	1.5" x 1/8" size strip	R.M	51.76	261.91	
28-72 a)	Providing and fixing 6" (150 mm) dia wind catcher of G.I. sheet 22 gauge (1.22 mm) of approved shape and design including the cost of wire gauze covering and bottom ring.	R.M	630.94	3149.91	
b)	Extra for every additional 25mm (1") dia over item No. 28-72(a).	R.M	63.09	41.01	
28-73	Providing and fixing 6" (150 mm) dia. C.I. pipe wind catcher of approved shape and design including the cost of wire gauze covering and bottom ring.	Kg	11.47	89.46	
28-74	Providing and fixing aluminium sheet of 22 gauge (1.15 mm) thick on wooden surface with sunken aluminium screws of required size.	Sq.m	110.53	14074.85	
28-75	Providing and fixing G.I. sheet of 22 gauge (1.15 mm) thick on wooden surface with sunken G.I. screws of required size.	Sq.m	110.53	1829.12	
28-76	Providing and installing M.S. spiral stair case with central post, railing and braces at required interval including two coats of paint but excluding the cost of cement concrete work in base.				
a)	5 ft. (1.5 m) dia.	Kg	512.64	5365.44	
b)	6 ft. (1.8 m) dia.	Kg	512.64	6336.00	
28-77	Providing and laying aluminium strips of any section in floor of any description.	R.M	67.40	577.27	
28-78	Providing and fixing aluminium ribbed nosing to treads of required section with aluminium lugs fixed with aluminium screws and rawl plugs.	R.M	252.77	3369.06	
28-79	Providing and fixing flat iron ribbed nosing to treads of required sections with iron lugs fixed with screws and rawl plugs.	R.M	252.77	272.38	
28-80	Providing and fixing brass ribbed nosing to treads of approved sections with iron lugs fixed with brass screws and rawl plugs.	R.M	252.77	6508.98	
28-81	Fixing enamelled iron gauzes flush with masonry including cost of hooks.	R.M	331.58	1364.54	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
28-82	Providing and fixing 2'-9" high Stair hand railing comprising of 2½" dia 16 gauge S.S pipe hand rail fixed with 2½" dia pipe blusters at specified distance fixed at top of steps with expansion bolts, 2 Nos. of 16 gauge 1" dia S.S pipes horizontally fixed with blusters, Complete in all respects.	R.M	286.31	3345.83	
28-83 a)	Providing and fixing Fibre Glass Window Shades 3 ft wide using 1.5 mm Fibre Glass with 1"x1" 16 guage sq. as approved by Engineer incharge including iron lugs, cutting holes and making good the damages to walls.	Sq.m	566.69	4051.50	
b)	Providing and fixing Fibre Glass Window Shades 3 ft wide using 2.0 mm Docorative Fibre Glass with 1"x1" 16 guage sq. as approved by Engineer incharge including iron lugs, cutting holes and making good the damages to walls.	Sq.m	566.69	4232.27	
28-84	Providing and fixing fully double glazed aluminium windows (Deluxe model) of anodized Shampane or approved color of Alcop, Pakistan Cable or any approved section including Aluminium fittings, hungs, cutting holes and making good damages to walls including 5 mm thich tinted tempered glass.	Sq.m	2456.15	15384.65	
28-85	Providing and fixing GI Razor wire fencing with 4 horizontal wires Spiral Type 12 SWG Sprial Wire and 26 SWG Lipping Blade 3" Pitch with four Horizontal Wire 20 SWG.				
a)	Single	R.M	119.30	1309.91	
b)	Double	R.M	238.59	2619.81	
28-86	Street Electric Pole with/ without Base Dia, Top Dia, Thickness etc. as per given drawing or as directed by Engineer-in-Charge, Galvanized excluding Civil Works	Kg	65.22	430.62	
28-87	Aluminium Louvers 50 mm in Depth and 1.3 mm thick, Supported by 2mm Thick 75 mm x 70 mm Square Aluminium Frame, Complete in all respect.	Kg	1864.88	18811.88	
28-88	Providing and fixing 12 mm tempered Glass Door and partition wall supported by Stainless Steel brackets and Door supported by Floor mounted Hinges Dorma or equivalent . Aluminium Bottom and Top rail along including door Handles cutting holes cost of fabrication and making good the damages to walls.	Sq.m	1382.51	6623.43	
28-89	Providing and Fixing including Galvanising & Manufacturing Guard Rail including 3 mm Steel Beam, Post, Reflector, Bolts and Nuts erecting in position excluding Civil Works	R.M	752.64	7831.44	

SECTION – 29

ORTICULTURE AND DRIP IRRIGATION

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
29-1	Rough dressing of the area for lawn including picking stones, pebbles, stubble, grass roots and other injurious matters and breaking of clods including disposal of rubbish within 300 ft (90m or 3 chains).	Sq.m	42.72		
29-2	Supplying and stacking well decayed cowdung manure from approved source including all leads and lifts.	Cu.m		480.00	
29-3	Spreading cowdung manure and mixing the same upto a depth of 4" (100mm) in the prepared bed including breaking clods, dressing for grassing including disposal of rubbish upto 300 ft (90 m or 3chains).	Cu.m	320.40		
29-4	Supplying and stacking well decayed sewage manure from approved source including all leads and lifts.	Cu.m		846.00	
29-5	Spreading sewage manure in uniform thickness in the prepared bed including mixing with original soil upto and depth including breaking clods and dressing for grassing including disposal of rubbish upto 300ft. (90m. or 3 chain)	Cu.m	267.00		
29-6	Supplying and stacking approved garden soil (sweet earth) free from salts, pebbles and grass roots including all leads and lifts.	Cu.m		960.00	
29-7	Spreading approved garden soil (sweet earth) in uniform thickness including mixing and breaking clods and dressing for grassing including disposal of rubbish within 300 ft. (90m or 3 chains).	Cu.m	267.00		
29-8	Supplying and stacking approved quality sand free from salts, pebbles, grass roots including all leads and lifts.	Cu.m		1695.60	
29-9	Dressing upto depth of 4" (100 mm) and preparing the bed for final finishing including sprinkling water, raking and rubbing.	Cu.m	640.80		
29-10	Spreading approved quality sand uniform thickness and mixing the sand, breaking clods, and dressing for grassing including disposal of rubbish within 300 ft (90m. or 3 chains).	Sq.m	160.20		
29-11 a)	Supplying and fixing of approved quality live local grass in shape of grass mats	Sq.m		193.20	
b)	Supplying and fixing of approved quality live Korean grass in shape of grass mats	Sq.m		322.80	
29-12 a)	Providng and fixing of Grassing by dibbing live Dhakka grass roots 3" (75 mm) apart including watering, weeding till such time the grass is set and becomes green and is fit for mowing (2kg for 1Sq. Ft. area).	Sq.m	170.88	172.81	
b)	Providng and fixing of Grassing by dibbing live Korean grass roots 3" (75 mm) apart including watering, weeding till such time the grass is set and becomes green and is fit for mowing (2kg for 1Sq. Ft. area).	Sq.m	170.88		
29-13	Supplying stone boulders of approved size and shape including all leads and lifts.				
a)	Stone boulder 9" (230 mm) size	Cu.m		208.40	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Stone boulder 6" (150 mm) size	Cu.m		201.90	
c)	Stone boulder 3" to 4" (75mm to 100mm) size	Cu.m		195.40	
29-14	Providing and fixing perforated standard bitumen drums for tree gaurds of approved design including painting in black and white.	Each		2512.50	
29-15	Providing and fixing 2" (50 mm) thick R.C.C. tree guards 48" x 30" x 30" (1.2 m x 0.75 m x 0.75 m) clear as per approved design and drawings including the cost of reinforcement and 3 coats of white washing	Each	1454.40	7345.73	
29-16	Providing and fixing 1:3:6 cement concrete solid block masonry 6" (150mm) thick honey combed, in tree guards average 5 ft (1.5 m) dia & 5 ft (1.5 m) high including foundation set in 1:6 cement sand mortar including curing and 3 coats of white washing (outside) as per approved design and drawings.	Each	1068.00	9540.86	
29-17	Providing and fixing first class burnt brick 4.5" (114 mm) thick masonry honey combed in tree guards average 5 ft (1.5 m) dia and 5 ft (1.5m) high including foundation set in 1:6 cement mortar including curing and 3 coats of white washing (outside) as per approved design and drawings.	Each	854.40	5858.90	
29-18	Supplying and fixing 48" x 30" x 30" (1.2m x 0.75m x 0.75m clear size frame in approved design and drawings of angle iron 18" x 18" x 1/4" (38mm x 38mm x 6mm) including painting and barbed wire in tree guards of required shape.	Each	964.08	10092.14	
29-19	Providing and fixing 48" x 30" x 30" (1.2m x 0.75m x 0.75m) clear size frame in approved design and drawings of shisham wood 2"x2" (50mm x 50mm) posts and frame with barbed wire in tree guards of required shape.	Each	727.20	11078.68	
29-20-1	Providing and fixing G.I. barbed wire 2 ply, 14 Guage fencing with two to four points to the posts of any description with hooks and binding wire excluding cost of posts.	Kg.	170.88	488.88	
29-21	Providing, laying, cutting, jointing, testing and disinfecting PVC pipes confirming to BSS-3505/PS-3051 complete in all respects.				
a)	PVC Pipe, 6 inches Dia, B-Class	R.M	18.43	1379.23	
b)	PVC Pipe,5 inches Dia, B-Class	R.M	18.43	978.43	
c)	PVC Pipe,4 inches Dic, B-Clcss	R.M	18.43	719.23	
d)	PVC Pipe, 3 inches Dia, B-Class	R.M	18.43	479.23	
e)	PVC Pipe, 2.5 inches Dia, C-Class	R.M	18.43	430.03	
f)	PVC Pipe, 2 inches Dia, C-Class	R.M	18.43	286.03	
g)	PVC Pipe, 1.5 inches Dia, D-Class	R.M	18.43	234.43	
h)	PVC Pipe, 1.25 inches Dia, D-Class	R.M	18.43	162.43	
29-22	Providing, laying, cutting, jointing, testing and disinfecting PVC pipes confirming to ISO-4422 complete in all respects.				
a)	PVC Pipe, 25 mm Dia, PN-6	R.M	18.43	108.43	
b)	PVC Pipe, 32 mm Dia, PN-6	R.M	18.43	168.43	
c)	PVC Pipe, 40 mm Dic, PN-6	R.M	18.43	246.43	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
d)	PVC Pipe, 50 mm Dia, PN-6	R.M	18.43	342.43	
e)	PVC Pipe, 63 mm Dia, PN-6	R.M	18.43	528.43	
f)	PVC Pipe, 75 mm Dia, PN-6	R.M	18.43	750.43	
g)	PVC Pipe, 90 mm Dia, PN-6	R.M	18.43	1050.43	
h)	PVC Pipe, 110 mm Dia, PN-6	R.M	18.43	1518.43	
i)	PVC Pipe, 140 mm Dia, PN-6	R.M	18.43	2298.43	
j)	PVC Pipe, 160 mm Dia, PN-6	R.M	18.43	3138.43	
29-23	Providing, laying, cutting, jointing, testing and disinfecting PE pipes confirming to ISO-4427 complete in all respects.				
a)	PE Pipe, 110 mm Dia, PN-8	R.M	36.86	1920.86	
b)	PE Pipe, 90 mm Dia, PN-8	R.M	36.86	1308.86	
c)	PE Pipe, 75 mm Dic, PN-8	R.M	36.86	948.86	
d)	PE Pipe, 63 mm Dia, PN-8	R.M	36.86	672.86	
e)	PE Pipe, 50 mm Dia, PN-8	R.M	36.86	444.86	
f)	PE Pipe, 40 mm Dia, PN-8	R.M	36.86	318.86	
29-24	Providing, laying, cutting, jointing, testing and disinfecting PE pipes confirming to ISO-4427 complete in all respects.				
a)	PE Pipe, 110 mm Dia, PN-10	R.M	36.86	2304.86	
b)	PE Pipe, 90 mm Dia, PN-10	R.M	36.86	1572.86	
c)	PE Pipe, 75 mm Dic, PN-10	R.M	36.86	1140.86	
d)	PE Pipe, 63 mm Dia, PN-10	R.M	36.86	804.86	
e)	PE Pipe, 50 mm Dia, PN-10	R.M	36.86	528.86	
f)	PE Pipe, 40 mm Dia, PN-10	R.M	36.86	378.86	
29-25	Providing and fixing at site Sand Media/ Gravel Filter comfirming to ISO 9912 Imported or approved equivalent (similar specifications), complete in all respects.				
a)	Discharge Capacity 10 m3/hr	Nos.	1413.60	91413.60	
b)	Discharge Capacity 20 m3/hr	Nos.	1454.40	133454.40	
c)	Discharge Capacity 25 m3/hr	Nos.	1454.40	133454.40	
d)	Discharge Capacity 30 m3/hr	Nos.	1454.40	199454.40	
e)	Discharge Capacity 35 m3/hr	Nos.	1454.40	199454.40	
f)	Discharge Capacity 40 m3/hr	Nos.	1454.40	199454.40	
g)	Discharge Capacity 45 m3/hr	Nos.	1454.40	199454.40	
h)	Discharge Capacity 50 m3/hr	Nos.	1454.40	277454.40	
i)	Discharge Capacity 60 m3/hr	Nos.	1454.40	409454.40	
29-26	Providing and fixing at site Disc Filter, comfirming to ISO 9912 Imported or approved equivalent (similar specifications), complete in all respects.				
a)	Discharge Capacity 15 m3/hr	Nos.	1454.40	16454.40	
b)	Discharge Capacity 20 m3/hr	Nos.	1454.40	23054.40	
c)	Dischcrge Ccpccity 25 m3/hr	Nos.	1454.40	43454.40	
d)	Discharge Capacity 30 m3/hr	Nos.	1454.40	43454.40	
e)	Discharge Capacity 35 m3/hr	Nos.	1454.40	43454.40	
f)	Discharge Capacity 40 m3/hr	Nos.	1454.40	67454.40	
g)	Discharge Capacity 45 m3/hr	Nos.	1454.40	67454.40	
h)	Discharge Capacity 50 m3/hr	Nos.	1454.40	67454.40	
i)	Discharge Capacity 60 m3/hr	Nos.	1454.40	16454.40	
29-27	Providing and fixing at site Screen Filter, comfirming to ISO 9912 Imported or approved equivalent (similar specifications), complete in all respects.				
a)	Discharge Capacity 15 m3/hr	Nos.	1454.40	19694.40	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Discharge Capacity 20 m3/hr	Nos.	1454.40	24854.40	
c)	Dischcrge Ccpccity 25 m3/hr	Nos.	1454.40	32414.40	
d)	Discharge Capacity 30 m3/hr	Nos.	1454.40	41654.40	
e)	Discharge Capacity 35 m3/hr	Nos.	1454.40	50654.40	
f)	Discharge Capacity 40 m3/hr	Nos.	1454.40	66254.40	
29-28	Providing and fixing at site Semi Automatic Cleaning/ Screening Filter, comfirming to ISO 9912 Imported or approved equivalent (similar specifications), complete in all respects.				
a)	Discharge Capacity 15 m3/hr	Nos.	1454.40	35054.40	
b)	Discharge Capacity 20 m3/hr	Nos.	1454.40	43454.40	
c)	Dischcrge Ccpccity 25 m3/hr	Nos.	1454.40	54254.40	
d)	Discharge Capacity 30 m3/hr	Nos.	1454.40	71054.40	
e)	Discharge Capacity 35 m3/hr	Nos.	1454.40	85454.40	
29-29	Providing and fixing at site Hydrocyclone Filter, comfirming to ISO 9912 Imported or approved equivalent (similar specifications), complete in all respects.				
a)	Discharge Capacity 15 m3/hr	Nos.	1454.40	18854.40	
b)	Discharge Capacity 20 m3/hr	Nos.	1454.40	23054.40	
c)	Dischcrge Ccpccity 25 m3/hr	Nos.	1454.40	30854.40	
d)	Discharge Capacity 30 m3/hr	Nos.	1454.40	30854.40	
e)	Discharge Capacity 35 m3/hr	Nos.	1454.40	30854.40	
f)	Discharge Capacity 40 m3/hr	Nos.	1454.40	39854.40	
g)	Discharge Capacity 45 m3/hr	Nos.	1454.40	39854.40	
h)	Discharge Capacity 50 m3/hr	Nos.	1454.40	39854.40	
i)	Discharge Capacity 80 m3/hr	Nos.	1454.40	55454.40	
29-30	Providing and fixing at site Ventury Assembly, comfirming to ISO 15873 Imported or approved equivalent (similar specifications), complete in all respects.				
a)	Ventury Assembly, 1"	Nos.	600.00	4800.00	
b)	Ventury Assembly, 1.5"	Nos.	600.00	8520.00	
c)	Ventury cssembly, 2"	Nos.	600.00	13800.00	
29-31	Providing at and fixing site Fertilizer Tank, comfirming to ISO standard, Imported or approved equivalent (similar specifications), complete in all respects.				
a)	Fertilizer Tank, 30 Litres	Nos.	600.00	27000.00	
b)	Fertilizer Tank, 60 Litres	Nos.	600.00	39000.00	
c)	Fertilizer Tcnk, 90 Litres	Nos.	600.00	54600.00	
d)	Fertilizer Tank, 120 Litres	Nos.	600.00	70200.00	
e)	Fertilizer Tank, 150 Litres	Nos.	600.00	84600.00	
f)	Fertilizer Tank, 200 Litres	Nos.	600.00	102600.00	
29-32	Providing and fixing at site Integrated Drip Line, comfirming to ISO- 8779, Imported or approved equivalent (similar specifications), complete in all respects.				
a)	Drip Line Plain, 12 mm (Wall Thickness 1mm)	R.M	18.43	62.59	
b)	Drip Line Plain, 15 mm (Wall Thickness 1mm)	R.M	18.43	79.15	
c)	Drip Line Plcin, 16 mm (Wcll Thickness 1mm)	R.M	18.43	98.47	
d)	Drip Line Plain, 20 mm (Wall Thickness 1.5mm)	R.M	18.43	139.87	
e)	Drip Line Plain, 25 mm (Wall Thickness 1.5mm)	R.M	18.43	177.13	
f)	Drip Line Plain, 32 mm (Wall Thickness 2.0mm)	R.M	18.43	259.93	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
29-33	Providing and fixing at site Integrated Drip Line 16 mm thickness, comfirming to ISO- 9261, Imported or approved equivalent (similar specifications), complete in all respects.				
a)	Emitter spacing at 0.20 m	R.M	18.43	115.03	
b)	Emitter spacing at 0.30 m	R.M	18.43	108.13	
c)	Emitter spccing ct 0.40 m	R.M	18.43	101.23	
d)	Emitter spacing at 0.50 m	R.M	18.43	90.19	
e)	Emitter spacing at 0.60 m	R.M	18.43	80.53	
29-34	Providing and fixing at site Integrated Drip Line 20mm thickness, comfirming to ISO- 9261, Imported or approved equivalent (similar specifications), complete in all respects.				
a)	Emitter spacing at 0.20 m	R.M	18.43	124.03	
b)	Emitter spacing at 0.30 m	R.M	18.43	116.83	
c)	Emitter spccing ct 0.40 m	R.M	18.43	112.03	
d)	Emitter spacing at 0.50 m	R.M	18.43	107.23	
e)	Emitter spacing at 0.60 m	R.M	18.43	96.43	
29-35	Providing and fixing at site Drippers, comfirming to ISO-926, Imported or approved equivalent (similar specifications), complete in all respects.				
a)	20 Litres per Hours	Nos.	18.43	40.03	
b)	24 Litres per Hours	Nos.	18.43	42.43	
c)	40 Litres per Hours	Nos.	18.43	52.03	
d)	70 Litres per Hours	Nos.	18.43	66.43	
e)	80 Litres per Hours	Nos.	18.43	72.43	
29-36	Providing at site Drippers, comfirming to ISO- 926, Imported or approved equivalent (similar specifications), complete in all respects.				
a)	20 Litres per Hours	Nos.	18.43	40.03	
b)	25 Litres per Hours	Nos.	18.43	42.43	
c)	40 Litres per Hours	Nos.	18.43	52.03	
d)	80 Litres per Hours	Nos.	18.43	72.43	
29-37	Providing and installing PreCast Parabolic Segments (PCPS) for lining of Watercourses as per drawings and with concrete mix ratio of 1:1:2, compacted on vibrating table, curing (Pond) for 28 days in the manufacturing yard, transporting from yard to field, laying/ installing at sites as per engineering design nd slope, ensuring proper jointing of male female ends and filling joints with 1:3 cement sand mortor and finally compacted backfilling along bothsides as per dimensions indicated on drawings and to the full satisfaction of Engineer in charge.				
a)	Precast Water Channel (PCPL) (14 x 9)	R.M	620.40	1516.80	
b)	Precast Water Channel (PCPL) (18 x 12)	R.M	620.40	1884.00	
c)	Precast Water Channel (PCPL) (24 x 18)	R.M	1090.80	3026.40	
d)	Precast Water Channel (PCPL) (24 x 14)	R.M	1090.80	2650.80	
e)	Precast Water Channel (PCPL) (27 x 18)	R.M	1090.80	3475.20	
f)	Precast Water Channel (PCPL) (30 x 21)	R.M	1090.80	4090.80	
g)	Precast Water Channel (PCPL) (36 x 24)	R.M	1090.80	4978.80	
h)	Precast Water Channel (PCPL) (45 x 27)	R.M	1090.80	6643.20	
i)	Precast Naka Structure 12"x30" 2.5" Thick	Each	1454.40	4334.40	
j)	Precast Naka Structure 15''x36" 3" Thick	Each	181.80	4021.80	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
k)	Precast Naka Structure 18''x42" 3.5" Thick	Each	363.60	4683.60	
l)	Precast Naka Structure 20''x48" 3.5" Thick	Each	363.60	5403.60	
m)	Precast Naka Structure 24''x54" 4" Thick	Each	545.40	6545.40	

SECTION – 30

ELECTRICAL INSTALLATIONS

1. RATES OF ALL FINISHED WORKS INCLUDE THE REMOVAL OF SURPLUS DEBRIS, UNUSED MATERIAL, BY PRODUCTS

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-1	Light circuit concealed/open wiring with length upto 75 ft. (25m) from distribution board to point/switch with 3x2.5 Sq.mm PVC insulated single core copper conductor Pakistan Cables, Pioneer, Newage or approved equivalent cables for offices/multi storeyed buildings.				
a)	Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	1027.20	14302.20	
b)	Open batten wiring with wooden batten and accessories such as clamps, nails, junction boxes etc.	Point	1027.20	24667.20	
c)	Open pipe wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	1797.60	15072.60	
d)	Light circuit concealed/open wiring with length upto 65 ft. (20m) from distribution board to point/switch with 3x2.5 Sq.mm PVC insulated single core copper conductor Pakistan Cables, Pioneer, Newage or approved equivalent cables for offices/multi storeyed buildings.	Point	1797.60	22819.80	
30-2	Open pipe wiring with M.S. conduit and accessories such as bends, elbows, junction boxes etc.				
a)	Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	821.76	11441.76	
b)	Open batten wiring with wooden batten and accessories such as clamps, nails, junction boxes etc.	Point	821.76	19733.76	
c)	Open pipe wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	1438.08	12058.08	
d)	Open pipe wiring with M.S. conduit and accessories such as bends, elbows, junction boxes etc.	Point	1438.08	18255.84	
30-3	Concealed/open wiring from point to switch with length upto 30 ft. (10m) including any switch to switch wiring with 3x1.5 Sq.mm PVC insulated single core copper conductor Pakistan Cables, Pioneer, Newage or approved equivalent cables,				
a)	Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	1540.80	4870.80	
b)	Open batten wiring with wooden batten and accessories such as clamps, nails, junction boxes etc.	Point	1540.80	9016.80	
c)	Open pipe wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	1669.20	4027.20	
d)	Open pipe wiring with M.S. conduit and accessories such as bends, elbows, junction boxes etc.	Point	1669.20	7671.77	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-4	Concealed/open wiring from point to point with length upto 10 ft. (3m) with 3x1.5 Sq.mm PVC insulated single core copper conductor Pakistan Cables, Pioneer, Newage or approved equivalent cables.				
a)	Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	462.24	1461.24	
b)	Open batten wiring with wooden batten and accessories such as clamps, nails, junction boxes etc.	Point	462.24	2705.04	
c)	Open pipe wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	500.76	1208.16	
d)	Open pipe wiring with M.S. conduit and accessories such as bends, elbows, junction boxes etc.	Point	500.76	2301.53	
30-5	Description same as item 30- 3 but wiring for two-way light points such that one light point is controlled by two numbers two-way switches and length from switches to point is upto 30 ft. (10 m).				
a)	Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	2054.40	6736.20	
b)	Open batten wiring with wooden batten and accessories such as clamps, nails, junction boxes etc.	Point	2054.40	17155.20	
c)	Open pipe wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	2054.40	11944.80	
d)	Open pipe wiring with M.S. conduit and accessories such as bends, elbows, junction boxes etc.	Point	2054.40	17316.19	
30-6	Concealed/open wiring for two way light points such that two light points are controlled by 2 numbers two way switches and length from switches to point is upto 40 ft. (12.5 m) with 3x1.5Sq.mm PVC insulated single core copper conductor Pakistan Cables, Pioneer, Newage or approved equivalent cables				
a)	Concealed wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	2311.20	9273.48	
b)	Open batten wiring with wooden batten and accessories such as clamps, nails, junction boxes etc.	Point	2311.20	21140.40	
c)	Open pipe wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	2311.20	14627.40	
d)	Open pipe wiring with M.S. conduit and accessories such as bends, elbows, junction boxes etc.	Point	2311.20	21343.50	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-7	Concealed/open wiring for two way light points such that three light points are controlled by 2 numbers two way switches and length from switches to point is upto 50 ft. (15m) with 3x1.5 Sq.mm PVC insulated single core copper conductor Pakistan Cables, Pioneer, Newage or approved equivalent cables				
a)	Concealed wiring with 3/4" (20mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	2824.80	11159.70	
b)	Open batten wiring with wooden batten and accessories such as clamps, nails, junction boxes etc.	Point	2824.80	24844.20	
c)	Open pipe wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	2824.80	17028.60	
d)	Open pipe wiring with M.S. conduit and accessories such as bends, elbows, junction boxes etc.	Point	2824.80	25088.03	
30-8	Concealed/open wiring for 5 Amp. Socket outlets from nearest available circuit with a length upto 20 ft. (6m) with 3x1.5 Sq.mm PVC insulated single core copper conductor Pakistan Cables, Pioneer, Newage or approved equivalent cables				
a)	Concealed wiring with 3/4" (20mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	1284.00	3989.04	
b)	Open batten wiring with wooden batten and accessories such as clamps, nails, junction boxes etc.	Point	1284.00	9586.32	
c)	Open pipe wiring with 3/4" (20 mm) dia. PVC conduit and accessories such as bends, elbows, junction boxes etc.	Point	1284.00	6460.08	
d)	Open pipe wiring with M.S. conduit and accessories such as bends, elbows, junction boxes etc.	Point	1284.00	9683.84	
30-9	Wiring of 5 Amps. socket outlet with 4 sq.mm PVC insulated single core copper conductor cable including 3/4" (20mm) dia. PVC conduit, 8.7sq.mm (10SWG) copper wire as earth continuity conductor and wiring accessories such as bends, elbows, junction boxes etc.	R.M.	82.18	991.54	
30-10	Description same as in Item 30- 9 but with 2.5 sq.mm PVC insulated single core copper conductor cable.	R.M.	82.18	719.38	
30-11	Supply and install 1-gang, 5 Amp, 250 Volt,. plate type moulded switch including appropriate size plastic box to be fixed recessed in wall.	Unit	128.40	722.40	
30-12	Description same as in Item 30-11 but with 2 gang switch.	Unit	171.20		
30-13	Description same as in Item 30-11 but with 3 gang switch.	Unit	214.00	1138.00	
30-14	Description same as in Item 30-11 but with 4 gang switch.	Unit	256.80	1286.40	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-15	Supply and installation of 5 Amp. 250 Volt, moulded, two-way single pole, flush mounting type light control single switch including appropriate size plastic box to be fixed recessed in wall.	Unit	214.00	4451.20	
30-16	Supply and install 5 Amp, 250 Volt moulded, one-way, single pole, flush mounting piano type light control switch on appropriate size plastic box to be fixed recessed in wall alongwith switch box and plate suitable for single switch on a common board.	No.	513.60	771.00	
30-17	Supply and install 5 Amp, 250 Volt moulded, one-way, single pole, flush mounting piano type light control switch alongwith fan dimmers on appropriate size plastic box to be fixed recessed in wall alongwith switch box and plate suitable for upto 3 switches on a common board.	No.	1027.20	1205.40	
30-18	Description same as in item 30-17 but upto 4 to 6 switches on a common board.	No.	770.40	915.60	
30-19	Supply and install combined 2/3 pin 5 Amps, 250 Volt switch socket unit including plastic box to be fixed recessed in wall.	No.	256.80	836.40	
30-20	Description same as in item 30-19 but 3 pin 15 Amps. switch socket unit.	No.	256.80	987.60	
30-21	Supply and installation of 3/4" (20 mm) dia PVC concealed conduit including all accessories such as bends, elbows etc.	R.M.	61.63	140.57	
30-22	Description same as in item 30-21 except 1" (25mm) dia PVC conduit.	R.M.	61.63	181.75	
30-23	Description same as in item 30-21 except 1.25" (30mm) dia PVC conduit.	R.M.	71.90	272.68	
30-24	Description same as in item 30-21 except 1.5" (40mm) dia PVC conduit.		71.90	346.46	
30-25	Description same as in item 30-21 except 2" (50mm) dia PVC conduit.	R.M.	102.72	559.18	
30-26	Supply and install 1.25" (30mm) dia G.I. pipe medium duty underground upto 36" (900mm) below finished surface for electric/communication service to the entrance to buildings.	R.M.	356.37	1723.22	
30-27	Description same as in item 30-26 but 2" (50 mm) dia. G.I. pipe.	R.M.	356.37	2585.06	
30-28	Description same as in item 30-26 but 4" (100 mm) dia. G.I. pipe.	R.M.	459.09	5683.05	
30-29	Description same as in item 30-26 but 6" (150 mm) dia. G.I. pipe.	R.M.	459.09	9045.74	
30-30	Description same as in item 30-26 but 3" (75 mm) dia. PVC pipe.	R.M.	356.37	961.17	
30-31	Supply and install 1.25" (30mm) dia G.I. pipe medium duty underground upto 36" (900mm) below finished surface for electric communication service to the entrance to buildings, 4" (100 mm) dia. PVC pipe.	R.M.	356.37	1339.17	
30-32	Supply and install 2.5 sq.mm PVC insultated single core 600/1000V.cable with copper conductor in already concealed PVC conduit.	R.M.	20.54	209.04	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-33	Description same as in item 30- 32 but 4.0 sq.mm cable.	R.M.	20.54	296.36	
30-34	Description same as in item 30- 32 but 6 sq.mm cable.	R.M.	20.54	429.41	
30-35	Description same as in item 30- 32 but 10 sq.mm cable.	R.M.	30.82	733.52	
30-36	Description same as in item 30- 32 but 16 sq.mm cable.	R.M.	30.82	1049.53	
30-37	Description same as in item 30- 32 but 25 sq.mm cable.	R.M.	41.09	1619.74	
30-38	Description same as in item 30- 32 but 35 sq.mm cable.	R.M.	41.09	2244.83	
30-39	Description same as in item 30- 32 but 50 sq.mm cable.	R.M.	41.09	3061.18	
30-40	Supply and install 25 sq.mm, 3.5 core, PVC insulated and sheathed multicore, 600/1000V cable with copper conductor directly clipped on surface of wall, column, beam, ceiling, etc. for power wiring.	R.M.	174.53	4634.08	
30-41	Description same as in item 30- 40 but 35 sq.mm 3.5 core cable.	R.M.	174.53	8240.39	
30-42	Description same as in item 30- 40 but 50 sq.mm 3.5 core cable.	R.M.	174.53	11106.77	
30-43	Description same as in item 30- 40 but 70 sq.mm 3.5 core cable.	R.M.	261.79	15860.23	
30-44	Description same as in item 30- 40 but 95 sq.mm 3.5 core cable.	R.M.	261.79	21726.31	
30-45	Description same as in item 30- 40 but 120 sq.mm 3.5 core cable.	R.M.	349.06	21813.58	
30-46	Supply and installation of 14 SWG (3.2 sq.mm) solid bare hard drawn electrolytic copper wire as earth continuity conductor in already installed/laid conduit or underground pipe.	R.M.	20.54	190.92	
30-47	Description same as in item 30- 46 but with 12 SWG (5.4 sq.mm) ECC.	R.M.	20.54	287.26	
30-48	Description same as in item 30- 46 but with 10 SWG (8.7 sq.mm) ECC.	R.M.	20.54	476.68	
30-49	Description same as in item 30- 46 but with 8 SWG (13 sq.mm) ECC.	R.M.	30.82	710.13	
30-50	Description same as in item 30- 46 but with 6 SWG (19 sq.mm) ECC.	R.M.	30.82	956.16	
30-51	Description same as in item 30- 46 but with 4 SWG (27 sq.mm) ECC.	R.M.	30.82	1353.51	
30-52	Description same as in item 30- 46 but with 2 SWG (38.6 sq.mm) ECC.	R.M.	41.09	1918.99	
30-53	Description same as in item 30- 46 but with 1/0 SWG (53 sq.mm) ECC.	R.M.	41.09	2615.18	
30-54	Description same as in item 30- 46 but with 2/0 SWG (61 sq.mm) ECC.	R.M.	41.09	3010.35	
30-55	Description same as in item 30- 46 but with 3/0 SWG (70 sq.mm) ECC.	R.M.	41.09	3434.38	
30-56	Supply and install 15 Amp, triple pole, 415 volts metal clad load breaker switch on surface of walls.	No.	513.60	1595.31	
30-57	Description same as in item 30- 56 but with 30 Amps. switch.	R.M.	513.60	1595.31	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-58	Description same as in item 30- 56 but with 60 Amps. Switch.	R.M.	513.60	1595.31	
30-59	Supply and install surface mounted flourescent light fixture tube light with a 40W. Lamp TMS-140 Philips type or approved equivalent complete with ballast, power factor improvement capacitor, starter etc. and including all installation materials.	No.	342.40	948.40	
30-60	Description same as in item 30- 59 but with Flouresent Tube light double. 40W lamps, Philips TMS-240 or equivalent make	No.	342.40	1190.80	
30-61	Description same as in item 30- 59 but with industrial reflector and flour tube light single. 40W lamps, Philips GKD-140 or equivalent make	No.	342.40	1069.60	
30-62	Description same as in item 30- 59 but with industrial reflector and flour tube light. 40W Double lamps, Philips GKD-240 or equivalent make	No.	342.40	1190.80	
30-63	Description same as in item 30- 59 but with flurescent Tube light acrylic plastic cover or louvers Single. 40W. Lamps, Philips type GMS-176 or approved equivalent.	No.	342.40	1378.66	
30-64	Description same as in item 30- 59 but with acrylic plastic cover or louvers and two Nos. 40W. Lamps, Philips type GMS-276 or approved equivalent.	No.	342.40	2366.44	
30-65	Description same as in item 30- 59 but with acrylic plastic cover or louvers and four Nos. 20W. Lamps, Philips type TCS-420L or approved equivalent.	No.	342.40	4220.80	
30-66	Description same as in item 30- 59 but with acrylic plastic cover or louvers and six Nos. 20W. lamps, Philips type GMS-276 or approved equivalent.	No.	342.40	5554.00	
30-67	Description same as in item 30- 59 but with batten and one No. 40W. Lamps, Philips type P-140 or approved equivalent.	No.	342.40	1251.40	
30-68	Description same as in item 30- 59 but with batten and one No. 20W. Lamps, Philips type P-120 or approved equivalent.	No.	342.40	1009.00	
30-69	Supply and install recessed mounting flourescent light fixture with 2Nos. 40W lamps acrylic plastic cover or louvers, Philips type TBS 300E /240L or approved equivalent, complete with ballast, power factor improvement capacitor, starter etc. including all installation material.	No.	342.40	5675.20	
30-70	Description same as item 30- 69 but with metal louvers and four Nos. 20W lamps - Philips type TBS 300 / 240 MI or approved equivalent.	No.	428.00	2973.20	
30-71	Description same as item 30- 69 but with four Nos. 40W lamps, plastic cover Philips type TBS 300 / 240 MI or approved equivalent.	No.	428.00	5760.80	
30-72	Description same as item 30- 69 but six Nos. 20W lamps - Philips type TFC-620 or approved equivalent.	No.	428.00	2973.20	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-73	Supply and install weather proof incandescent light fixture comprising die-cast aluminium body with front glass cover fixed to the body by means of stainless steel screws and neoprene gasket, G.I. wire guard, 1 No 100W lamp, including all installation material Philips type or approved equivalent.	No.	342.40	3309.40	
30-74	Supply and install ceiling mounted incandescent light fixture with glass cover and 2 - 60W lamps, Philips type NCD-533 or approved equivalent.	No.	342.40	1149.40	
30-75	Supply and install wall mounted incandescent light fixture with 60W lamp, Philips type NBRS-511 or approved equivalent.	No.	256.80	1783.80	
30-76	Description same as in item 30- 75 but ceiling mounted, Philips type NBR-511 or approved equivalent.	No.	256.80	1783.80	
30-77	Supply and install recessed mounted incandescent light fixture with 100W lamp including all installation materials, Philips type DDN-24 or approved equivalent.	No.	256.80	667.80	
30-78	Supply and install recessed mounted light fixture with 150W pressed glass lamp, including all installation materials - Philips DSS-10 type or approved equivalent.	No.	256.80	1996.80	
30-79	Supply and install high bay mercury vapour light fixture with 400W. HPLN lamp ballast, with ballast housing, pipe fixing arrangement etc. Philips HDK-463 type or approved equivalent.	No.	770.40	6170.40	
30-80	Supply and install mercury vapour light fixture Philips HRC-511 type with 250W. mercury vapour lamp, polyester filled ballast on already installed tubular pole.	No.	770.40	2870.40	
30-81	Description same as item 30-80 but with 250W son & Ignitor Philips HRC-511 type or approved equivalent.	No.	770.40	13370.40	
30-82	Supply and install mercury vapour light fixture with 125W PHL-N lamp. ballast starter, power factor improvement capacitor including suspension rod with fixing arrangement, accessories etc, Philips HRP 38 type or approved equivalent.	No.	770.40	6170.40	
30-83	Description same as in item 30- 82 but with HPLN-80W lamp Philips HRC-510/80W type or approved equivalent.	No.	770.40	3650.40	
30-84	Supply and install 100W wall mounted emergency lighting unit with 2 lamps, Ni-Cd battery, battery charger unit and wall mounting bracket, Presto-beam, Model st-v	No.	1027.20	2827.20	
30-85	Supply and install wall mounted weather proof flood light fixture with 250W,HPL-N mercury vapour lamp, ballast starter, power factor improvement capacitor, including accessories, installation materials. Philips H/SVF-10 type or approved equivalent.	No.	770.40	3710.40	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-86	Description same as in item 30- 85 but with 400W. HPL-N lamp Philips H/SVF-10 type or approved equivalent.	No.	770.40	2870.40	
30-87	Supply and install 56" (1.42 m) sweep ceiling fan with fan hook and dimmer complete with all accessories.	No.	770.40	9950.40	
30-88	Description same as iterm 30- 87 but with 48" sweep ceiling fan.	No.	770.40	9950.40	
30-89 a)	Rewinding of 56" and 48" sweep ceiling fan.	No.	1800.00		
b)	Fixing of ceiling fan to ceiling	No.	770.40		
30-90	Supply and install earth connecting point of 10"x 2"x 1/4" (255mm x 50mm x 6mm) size of tinned copper bar, including brass/tinned copper bolts, nuts and washers.	No.	513.60	2361.60	
30-91	Supply and install pair of earth electrode each comprising 24"x12" (600mmx 3mm) thick copper plate buried 13 ft. (4m) deep underground in upright position in a pit and surrounded by mixture of salt and charcoal (1:3), 12" (300mm) min dia around the plate. The job also includes providing and fixing all accessories such as nuts, bolts, washers, 2x3/0 SWG (2x70mm) copper conductor earthing lead.	Job	5180.16	211817.41	
30-92	Supply and install pair of earth electrode comprising 13 ft (4m) long 2" (50mm) dia G.I. pipe having 3/8" (10mm) dia holes at 20" (500mm) c/c all along the length of pipe burie 15ft (4.5m) underground in upright position including all accessories for complete installation such as nuts bolts, washers 2x3/0 SWG copper conductor earthing lead complete in all respect.	Job	5817.60	58712.96	
30-93	Supply and install 12" x 1/8" (25mm x 3mm) copper strip for lighting protection including all installation accessories such as copper clamps nuts, bolts, washers, testing terminal etc. on surface of roof, wall etc.	R.M.	61.63	2517.47	
30-94	Description same as in item 30- 93 but underground at a depth of 24" (600mm) from ground level.	R.M.	64.71	2643.34	
30-95	Supply and install 8 ft (2.5 m) long 5/8" (16mm) dia hard-drawn copper rod earth electrode underground for lighting protection including all accessories such as nuts, bolts, fixing clamps etc. The earth electrode shall be installed such that its top is 14" (350mm) below finished ground level.	Job	2054.40	21003.00	
30-96	Supply and install 6.5 ft (2 m) long 3/8" (10mm) dia vertical air termination hard-drawn copper rod vertically on building top, including all fixing accessories such as copper flanges, mild steel anchor bolts, copper clamps etc.	Job	2054.40	16278.19	
30-97	Construction of 20" x 20" (500mm x 500 mm) square inspection chamber for earth electrodes including medium duty C.I. cover and all associated civil works.	Job	2204.62	12983.87	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-98	Supply and install wall mounted 4 ways, 5 Amp, flush mounting type telephone rosette including plastic box and face plate.	No.	85.60	367.60	
30-99	Supply and install recessed type telephone distribution box suitable for 20 pair cable including appropriate size 16 SWG sheet steel box with hinged, latched and lockable cover.	No.	4108.80	5645.47	
30-100	Description same as in item 30- 99 but with 30 pair telephone distribution box.	No.	4108.80	6745.51	
30-101	Description same as in item 30- 99 but with 40 pair telephone distribution box.	No.	4108.80	8030.95	
30-102	Description same as in item 30- 99 but with 60 pair telephone distribution box.	No.	4108.80	9514.15	
30-103	Description same as in item 30- 99 but with 100 pair telephone distribution box.	No.	4108.80	10997.35	
30-104	Provide, install, connect, test and commission 3 phase 500V, 800 Amps, L.T.. Bus-tie duct for connection between transformer L.T and L.T. switch board. Bus-duct shall comprise rectangular copper conductor insulated and enclosed in corrosion resistant sheet steel enclosure complete with all installation, supporting materials and accessories.	R.M.	2242.56	87335.04	
30-105	Description same as in item 30- 104 but with 1200A bus tie duct.	R.M.	2242.56	124226.40	
30-106	Description same as in item 30- 104 but with 1600A bus tie duct.	R.M.	2242.56	143614.56	
30-107	Supply, install, connect Ceiling Fan energy efficent model as approved and rated 3-Star by NEECA with power consumption of less than 80 W+10%	Job	920.40	9080.40	
30-108 a)	Supply and Install wall Mounted Split Air Conditioners invertor Energy Saver Model 1 Ton	Job	2568.00	142079.52	
b)	Supply and Install wall Mounted Split Air Conditioners invertor Energy Saver Model 1.5 Ton	Job	2568.00	171455.52	
c)	Supply and Install wall Mounted Split Air Conditioners invertor Energy Saver Model 2 Ton	Job	2568.00	241223.52	
30-109 a)	Supply and Install Cabnet Type Split Air Conditioners invertor Energy Saver Model 2.5 Ton	Job	5136.00	289201.92	
b)	Supply and Install Cabnet Type Split Air Conditioners invertor Energy Saver Model 3 Ton	Job	5136.00	460561.92	
c)	Supply and Install Cabnet Type Split Air Conditioners invertor Energy Saver Model 4Ton	Job	5136.00	669865.92	
30-110	Supply, install, connect, test and commission 3 core 95 Sq.mm 11 KV, cross link polythene insulated shielded, armoured and PVC jacketted cable for connecting transformers to HT panel complete in all respect.	R.M.	581.76	16646.76	
30-111	Wiring of bell point length upto 50 ft (15m) including supply of bell and bell push, 3x1.5 Sq.mm PVC insulated single core copper conductor cable in concealed PVC 3/4" (20mm) dia. conduit and wiring accessories such as elbows, bends, junction boxes, etc	No.	1027.20	5603.70	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-112	Supply and install single arm fancy wall bracket comprising brass bracket, apple white cylinderical glass shade, lamp holder with 100W lamp.	No.	342.40	2706.40	
30-113 a)	Supply and install 10" (250 mm) sweep exhaust fan including plastic louvers.	No.	770.40	4250.40	
b)	Supply and install 8" (200 mm) exhaust fan including plastic louvers.	No.	770.40	3650.40	
c)	Supply and install 6" (200 mm) exhaust fan including plastic louvers.	No.	770.40	2990.40	
30-114	Supply and install 20" (500 mm) sweep revolving bracket fan with guard.	No.	770.40	8592.00	
30-115	Supply and install distribution board, 18 SWG steel sheet 18"x24" enclosure, suitable for recess mounting, comprising one incoming MCCB-TP/100A, Outgoing 9 single phase MCB of various capacity with internal wiring earthing, neutral link etc. alongwith three Digital Amp. meters with lights.	Each	4108.80	32370.60	
30-116 a)	Provide, install, test and commission recessed wall mounting type distribution board fabricated from 16 SWG steel sheet, powder coated with approved color back box comprising one incoming MCCB-TP/60A and outgoing 9 single phase MCB of various capacity having overload & short circuit protection and of 6 KA braking capacity complete with internal wiring earthing, nuetral link, termination blocks, phase indicating lights alongwith 500V voltmeter.	Each	4108.80	38002.80	
b)	Extra for installing each number circuit breaker 6 Ampere on same distribution board and bus bar (For outgoing)	Each	1027.20	5626.20	
30-117	Supply and install Energy Saver electric bulbs				
a)	25W to 100W	Each	35.60	359.60	
b)	200 Watt bulb	Each	35.60	3035.60	
c)	25W Philips energy saver	Each	35.60	695.60	
30-118	Supply and install Electric motors with pump including all accessories.				
a)	1 HP electric motor with pump	Each	1840.80	42160.80	
b)	1/2 HP electric motor with pump	Each	1840.80	33520.80	
c)	Rewinding of electric motor 1 HP	Each	3254.40	7521.60	
d)	Rewinding of electric motor 1/2 HP	Each	2440.80	6057.12	
30-119	Supply and install 30 Amp. electric cutout (set of three) including all accessories.	Each	600.00	1464.00	
30-120	Supply and install 40W electric tube light rod including patty	Each	513.60	1899.60	
30-121	Supply and replace				
a)	Tube patty	Each	256.80	949.80	
b)	Tube rod	Each	51.36	681.36	
c)	Tube choke (EECO or equivalent) for maintenance work only	Each	150.00	1536.00	
d)	Tube starter for maintenance work only	Each	51.36	111.36	
30-122	Supply and install				
a)	Brass holder for maintenance work only	Each	51.36	262.56	
b)	Plastic holder including base plate	Each	51.36	156.96	
30-123	Supply and install				

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
a)	35 gallons electric geyser	Each	770.40	62570.40	
b)	55 gallons electric geyser	Each	770.40	70970.40	
30-124	Light Fixture Philips Type LED 13W,complete in all respect with allied accessories or approved equivalent. The fitting shall be approved by the Engineer				
a)	LED Bulbs	Each	410.88	698.88	
b)	LED Panel Lights	Each	410.88	6650.88	
c)	LED Tube Light	Each	410.88	2570.88	
30-125	Supply, installation, testing and commissioning of 220 Volts, single phase, 50 Hz Brand New UPS complete in all respect of the following rating:				
a)	750 Watt	Each	4108.80	25708.80	
b)	1000 Watt	Each	4108.80	30508.80	
c)	1500 Watt	Each	4108.80	42508.80	
d)	2000 Watt	Each	4108.80	58108.80	
30-126	FIRE ALARM SYSTEM				
a)	Fire resistance insulated 2-core, 1.5mm2 cable in PVC Conduits in 25 mm2 conduit	R.M.	337.01	735.97	
b)	Addressable break glass manual call stations (Copper Menvier UK, Honey well,Gent or approved equivalent).	Each	410.88	13010.88	
c)	Addressable sounder and accessories (Copper Menvier UK, Honey well,Gent or approved equivalent).	Each	410.88	16610.88	
d)	Addressable Photo electric Smoke Detectors as approved by the engineer (Copper Menvier UK, Honey well, Gent or approved equivalent).	Each	410.88	13010.88	
e)	Addressable Heat Detectors as approved by the engineer (Copper Menvier UK, Honey well, Gent or approved equivalent).	Each	410.88	11810.88	
f)	Addressable Fire Alarm Control Panel as per project specified requirements (2 Loop) including backup battery, complete with all installation accessories, testing and commissioning (Copper Menvier UK, Honey well, Gent or approved equivalent).	Each	410.88	252410.88	
30-127	Add extra for respective payable item of ground floor				
a)	For first floor	%age	10.00%		
b)	For every additional floor above first floor	%age	7.50%		
30-128	Supply and install Pole mounted weather proof LED light per Watt fixture including accessories, installation materials. Philips or approved equivalent	No.	12326.40	32126.40	
30-129	Supply and install 1-gang, 5 Amp, 250 Volt,. plate type moulded Clipsal/Schneider or equivalent imported switch including appropriate size plastic box to be fixed recessed in wall.	No.	128.40	953.40	
30-130	Description same as in Item 30-129 but with 2 gang switch.	No.	171.20	1075.40	
30-131	Description same as in Item 30-129 but with 3 gang switch.	No.	214.00	1303.00	
30-132	Description same as in Item 30-129 but with 4 up to 6 gang switch.	No.	256.80	1695.60	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
30-133	Supply and installation of 5 Amp. 250 Volt, moulded, two-way single pole, flush mounting type light control single switch including appropriate size plastic box to be fixed recessed in wall.	No.	214.00	5375.20	
30-134	Supply and install 5 Amp, 250 Volt moulded, one-way, single pole, flush mounting piano type light control switch alongwith fan dimmers on appropriate size plastic box to be fixed recessed in wall alongwith switch box and plate suitable for upto 3 switches on a common board (Clipsal-Schneider or equivalent)	No.	1027.20	2512.20	
30-135	Supplying Poles of approved make including the cost of specials.				
a)	MS Tabular pole 31 FT Length with 20ft (6" dia) x 5.5ft (5" dia) x 5.5ft (4" dia)1 8 SWG thick with base plate 1.8"x1.8"x¾ with 4 no's holes.	No.	1581.60	80121.60	
b)	MS Tabular pole 40 FT Length with size 20ft (6" dia) x 10ft (5" dia) x 10ft (4" dia) 18 SWG thick with base plate 1.8"x1.8"x¾ with 4 no's holes.	No.	1688.40	133028.40	
c)	Octagonal pole 50ft Length with 6" top & bottom 24" ,base plate 32" x 32" x 1''.	No.	2052.00	149232.00	
d)	Hexagonal pole 40ft Length with 4" top & bottom 12", base plate 24" x 24" x 1''.	No.	1581.60	132921.60	
e)	Tabular pole 31ft Length with 20ft (6" dia) x 5.5" (5" dia) x 5.5" (4"dia), base plate 16"x16''x¼".	No.	1368.00	79908.00	
30-136	Supplying and fixing of approved make pole arms including the cost of specials.				
a)	a) G.I. single arm bracket 5' long 2" dia. Standard with paint	No.		1800.00	
b)	b) G.I. single arm bracket 7' long 2" dia. Standard with paint	No.		2400.00	
c)	c) G.I. single arm bracket 5' long 2" dia with 5" dia 1' long canopy.	No.		3000.00	
d)	d) G.I. single arm bracket 7' long 2" dia with 5" dia 1' long canopy.	No.		3600.00	
e)	e) G.I. double arm bracket 5' long 2" dia.	No.		3000.00	
f)	f) G.I. double arm bracket 7' long 2" dia.	No.		3600.00	
g)	g) G.I. double arm bracket 5' long 2" dia with 5" dia 1' long canopy.	No.		4200.00	
h)	h) G.I. double arm bracket 7' long 2" dia with 5" dia 1' long canopy.	No.		4800.00	
i)	i) Angle iron bracket in Square shape for 3 to 4 no's flood lights.	No.		6000.00	
j)	j) Angle iron bracket in hexagonal shape for 5 to 6 no's flood lights.	No.		8880.00	
k)	k) G.I. pipe bracket in Hexagonal shape for 6 no's street lights.	No.		16800.00	
l)	l) Junction box in size 10" x 8" x 5".	No.		3900.00	
m)	m) Junction box in size 8" x 6" x 4".	No.		2976.00	

SECTION – 31

MISCELLANEOUS

1. RATES OF ALL FINISHED WORKS INCLUDE SITE CLEARANCE

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
31-1	Solar System (Chinese)				
a)	Supply, Install, connect, test and commission of SOLAR PANEL (Chinese) & accessories.	Per Watt	1.23	47.74	
b)	Supply, Install, connect, test and commission of SOLAR INVERTER (Chinese) & accessories.				
i)	Supply and Erection of off Grid Hybrid inverter	Per Watt	3.85	51.59	
ii)	Supply and Erection of On Grid Hybrid inverter	Per Watt	3.85	51.59	
iii)	Supply and Erection of GRID TIE INVERTER (ON-Grid Inverter) (0-10 KW)	Per Watt	4.88	75.87	
iv)	Supply and Erection of GRID TIE INVERTER (ON-Grid Inverter) (10-20 KW)	Per Watt	4.88	61.18	
v)	Supply and Erection of GRID TIE INVERTER (ON-Grid Inverter) (20-30 KW)	Per Watt	4.88	55.06	
vi)	Supply and Erection of GRID TIE INVERTER (ON-Grid Inverter) (above 30 KW)	Per Watt	4.88	55.06	
c)	Charge Controller Advanced MPPT algorithm with the max. tracking efficiency of 95%,• Peak conversion efficiency 90%• LCD displays• Four battery type options: Sealed, Gel, Flooded and User-defined• Energy statistics recording• Programmable battery management parameters• Built-in running data and event logging, max. 15 months• Log function: work logs and alarm logs are all recorded• Field upgradable firmware• Self-consumption 1.4～2.2W • Grounding Common negative• Temp. compensation -3mV/℃/2V• Enclosure IP20• Working temperature -25℃ ~ +55℃ Supply, Install, connect, test and commission of SOALR CHARGE CONTROLLER (Chinese) & accessories.	perAmp 12/24 V	10.27	1356.67	
d)	MOUNTING STRUCTURE FIXED - Galvanized iron mounting structures - supported by galvanized Footing -120 Kmph wind speed withstanding Supply, Install, connect, test and commission of SOLAR MOUNTING STRUCTURE & accessories.				
i)	Fixed L2 12 SWG	per Watt		4.90	
ii)	Fixed L2 14 SWG	per Watt		4.28	
iii)	Fixed L3 14 SWG Round GI Pipe	per Watt		12.24	
iv)	Fixed L3 14 SWG Square MS Pipe	per Watt		14.08	
v)	Movable Structure For Solar Panels (L4) 14 Swg	per Watt		14.08	
e)	12V Battery Type: Standard Lead Acid and its life Cycles will be 600 @ 50% DoD Max Temperature 25 Degree Celsius Supply, Install, connect, test and commission of BATTERIES-LEAD ACID & accessories.				
i)	600 Cycle	per AH	10.27	561.07	
ii)	12V Battery Type: Standard Lead Acid and its life Cycles will be 1000 @ 50% DoD Max Temperature 25 Degree Celsius Supply, Install, connect, test and commission of BATTERIES-LEAD ACID & accessories.	per AH	10.27	561.07	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
iii)	12V Battery Type: Standard Lead Acid and its life Cycles will be 1500 @ 50% DoD Max Temperature 25 Degree Celsius Supply, Install, connect, test and commission of BATTERIES-LEAD ACID & accessories.	per AH	10.27	622.27	
iv)	12V Battery Type: Standard Lead Acid and its life Cycles will be 2000 @ 50% DoD Max Temperature 25 Degree Celsius	per AH	10.27	1050.67	
g)	- 1000+ cycles @ 50% DoD)- Sealed maintenance free-tubular gel Valve Regulated Lead Acid (VRLA) type. - Deep-cycle lead-acid batteries of the sealed type. - Explosion proof vent plug s at the upper part of the container. - ambient temperature of –10oC to +40oC. - Lead Plated Solid Copper Connectors. - easy access and sufficient flexibility at the time of cell unit replacement, and also easy to check the status.	per AH	10.27	769.15	
h)	- 600+ cycles @ 50% DoD)- Sealed maintenance free-tubular gel Valve Regulated Lead Acid (VRLA) type. - Deep-cycle lead-acid batteries of the sealed type. - Explosion proof vent plug s at the upper part of the container. - ambient temperature of –10oC to +40oC. - Lead Plated Solid Copper Connectors. - easy access and sufficient flexibility at the time of cell unit replacement, and also easy to check the status. Supply, Install, connect, test and commission of 2VOLT CELL-MAINTENANCE FREE & accessories. (600 Cycles)	per AH	10.27	450.91	
i)	- ambient temperature of –10oC to +40oC.- easy access and sufficient flexibility at the time of cell unit replacement, and also easy to check the status.FREE Li-ion (PO4) Supply, Install, connect, test and commission of BATTERIES-MAINTENANCE FREE Li- ion (PO4) & accessories.	per AH	10.27	867.07	
j)	12V Battery Type: GEL and its life Cycles will be equal than 1000 @ 50% DoD Max Temperature 25 Degree Celsius) Supply, Install, connect, test and commission of BATTERIES-GEL 1000 Cycles & accessories.	per AH	10.27	769.15	
k)	12V Battery Type: GEL and its life Cycles will be equal than 600 @ 50% DoD Max Temperature 25 Degree Celsius)Supply, Install, connect, test and commission of BATTERIES-GEL 600 & accessories.	per AH	10.27	561.07	
l)	Supply, Install, connect, test and commission of BATTERIES-AGM 600 & accessories.	per AH	10.27	450.91	
m)	Supply, Install, connect, test and commission of BATTERIES-AGM 1000 & accessories.	per AH	10.27	646.75	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
31-2	SOLAR PANEL -Efficiency should be more than 16%- fill factor should be more than 75%- Monocrystalline/Polycrystalline Structure- nominal voltage ratings of 12, 24, or 48 V - Warranty: 80% Output after 25 years - Environmental Data: -10 to 90 C- IEC Certification 61215, 61730 Part I and II-Junction Box IP 67 Rating-Nominal Operating Cell Temperature 45±2 C-Max System Voltage 1000V DC (IEC) Supply, Install, connect, test and commission of SOLAR PANEL (European) & accessories.	Watt	1.23	80.79	
a)	Solar Inverter -Rating- Power capacity of the inverter including Continuous, Limited-Time and Stack rating voltage conversion and regulation of the varying amounts of DC voltages and currents generated by the PVPs by External MPPT Charge Controller. - Total Harmonic Distortion (THD), - RMS (Root Mean Square) Voltage - Peak Voltage regulation- Pure Sine Wave- Automatic ON/OFF- Stack/Modular arrangement (connecting two or more inverters in parallel to perform as one unit). - Under/Over Voltage & Over Current protection- Both single/three phase type. - Multi-string input with string failure detection. - AC short circuit protection. - Ground fault monitoring. - Grid monitoring. - Ingress protection rating / electrical connection: IP66.- CEC Efficiency> 97%, - Warranty: 2 years - EN 62109-1 2010 (Safety), EN 61000-6-2:2005 (EMC compatibility) Supply, Install, connect, test and commission of INVERTER (European) & accessories.	Watt	3.85	88.31	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
b)	Charge Controller MPPT • Nominal battery voltage 12, 24, 36, 48, 60 V• Battery voltage operating range 0 Vdc to 80 Vdc• Max. PV array voltage (operating) 140 V• Max. PV array open circuit voltage 150 V • Max. array short-circuit current 60 A (48 A @ STC)• Max. charge current 60 A (for all battery voltages except 60 V)• Max. output power 3500 W• Supported battery types Flooded, GEL, AGM, Custom• Max. power conversion efficiency 93% (nominal 12 V), 96% (nominal 24 V), 97% (nominal 36 V), 98% (nominal 48 V), 99% (nominal 60 V)• Power consumption, night time 2.5 W• Auxiliary output 5 - 13 V, up to 200 mA• IP degree of protection IP20• Device mounting Vertical wall mount• Ambient air temperature for operation -20°C to 45°C (-4°F to 113°F)• Storage temperature range -40°C to 85°C (-40°F to 185°F) full power, power derating above 45°C• Safety CSA Certified (UL1741, CSA 107.1) and CE Marked for the Low Voltage Directive (EN50178)• EMC FCC and Industry Canada (Class B), CE Marked for the EMC Directive (EN61000-6-1, -6-3), C-Tick compliant Supply, Install, connect, test and commission of CHARGE CONTROLLER (European) & accessories.	per Amp	10.27	499.87	
c)	•Charge Controller PWM • Nominal battery voltage 12, 24, 36, 48, 60 V	per Amp	10.27	120.43	
31-3	Supply, Install, connect, test and commission of CABLES & accessories. DC Cable - Stranded and flexible insulated copper DC wires and cables must be used for all outdoor and indoor installations. - voltage drop must not exceed 1% on DC side of the power inverter and 1.5% on AC side of the power inverter. - The wiring that leads into the pole, protected in a PVC Spiral / Flexible conduit. - External cables adapted to outdoor exposure as per IEC 60811. - The outer insulation: sunlight (UV)-resistant and weather-proof.				
a)	DC Cable 1.5 mm2 Single Core	R.M	10.27	108.19	
b)	DC Cable 2.5mm2 Single Core	R.M	10.27	171.84	
c)	DC Cable 4mm2 Single Core	R.M	10.27	253.85	
d)	DC Cable 4mm2 Two Core	R.M	10.27	584.33	
e)	DC Cable 6mm2 Single Core	R.M	10.27	387.26	
f)	DC Cable 6mm2 two Core	R.M	10.27	876.86	
g)	DC Cable 6mm2 four Core	R.M	10.27	1876.87	
h)	DC Cable 10mm2 Single Core	R.M	10.27	632.06	
i)	DC Cable 10mm2 two Core	R.M	10.27	1468.06	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
j)	DC Cable 10mm2 Four Core	R.M	10.27	2794.87	
k)	DC Cable 16mm2 single Core	R.M	10.27	911.14	
l)	DC Cable 16mm2 two Core	R.M	10.27	1532.93	
m)	DC Cable 16mm2 Four Core	R.M	10.27	3351.79	
n)	DC Cable 25mm2 single Core	R.M	10.27	1404.41	
o)	DC Cable 25mm2 two Core	R.M	10.27	3804.67	
31-4	Supply and Install, connect, test and commission of CCTV cameras (Chinese) complete with power cord, interconnecting cables and mounting brackets & accessories.				
a)	Indoor/Outdoor IP based static Camera withFull HD, 30-60 fps, 6 - 8 viewing profile, inbuilt IR, SD card supported, PoE.	Each	1540.80	13780.80	
b)	Indoor / Outdoor PTZ Camera: with Full HD, 45-60 fps, 6-8 viewing profile, 150 meter IR, SD-card supported	Each	1540.80	72532.80	
c)	Box Camera: with 32x zoom lens, Full HD, 30-60 fps, 6-8 viewing profile, SD card supported and external casing with 50 meter plus IR, PoE.	Each	1540.80	13168.80	
31-5 a)	Network Video Recorder (NVR): 64 channel, 400Mbps, with 4TB storage/HDD (Max. 12 storage/HDD support), complete with power cord, interconnecting cables and mounting brackets & accessories.	Each	8217.60	173457.60	
31-5 b)	Network Video Recorder (NVR): 16 channel, >320 Mbps with 2x3TB storage/HDD, complete with all cables and allied mounting brackets & accessories.	Each	8217.60	35757.60	
31-6	Supply and Install, connect, test and commission of Core i7, 6/7th Generation with 2GB graphics Card for Video Management system (VMS) with all allied accessories.	Each	4108.80	94684.80	
31-7	Supply & Installation of 24 port Layer-2 manageable PoE enabled switch with 4U Rack & patch panel.	Each	10272.00	86160.00	
31-8	Supply and Installation 24 port PoE based Layer-3 manageable aggregation switch with all allied accessories.	Each	10272.00	111252.00	
31-9	Supply and Installation 8 port PoE based Layer-2 manageable switch with all allied accessories.	Each	10272.00	31692.00	
31-10	Providing and fixing of road blocker of any length , 3.5 feet width , 2.5 feet height with Italian or equivalent power pack unit including accumuator but excluding Civil Works	Each	15590.40	688790.40	
31-11	Providing and fixing of Tyre Killer of any length, local made excluding Civil Works	Each	10790.40	70561.99	
31-12	Providing and fixing Road boom barrier up to 4 m • Hydraulic operator with opening and closing block including siginal lights IP-24D • Italian Brand Communello or approved equivalent	Each	15590.40	42518.40	
31-13	Providing, Fixing and installing Access control system including networking with cat 6 cable in management system without pc but including electromagnetic lock system.	Each	5308.80	20608.80	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
31-14	Providing and fixing of wakthrough gate of 33 zones of Garrett or its Koreaian approved equivalent including all accessories.	Each	4108.80	291748.80	
31-15	Providing and fixing Bullet protection film for Bullet proofing of Glass exclding the cost of glass.	Sqm	300.00	6110.40	
31-16	Supply, Installation, testing and commissioning of imported brand new passenger/patient Elevator, Machine Room Less (MRL), heavy duty fully complied and certified by latest EN 81 Standards and for public use in buildings of minimum features including but not limited to VVVF high efficiency motor, complete stainless steel finish, indoor type for ambient condition of 45 °C, capacity of 630 Kg/08 persons, speed 1 m/sec, 04stops/04 openings, total travel height 16 m, entrance 900mm. Lift shall minimum includes car, hoisting machinery, counter-weight, supports, brackets, automatic controls, embedded parts, access ladder, separator screen & trap door, electric overload buzzer, shaft lightening, intercom system, gong, emergency operation for cabin/door, emergency rescue device (ups/battery) safety devices, Two (02) years of defect liability period with spare parts for two years complete in all respects as per specification and according to EN 81 standard compliance including civil works and electrical accessories. (Also Refer to technical data sheet) including 17 % Sales Tax on Supply, 5% Custom Duty, 6% withholding tax & 2% other taxes.	job	240000.00	3544800.00	
31-17	Supply, Installation, testing and commissioning of imported brand new Passenger/Patient Elevator, Machine Room Less (MRL), heavy duty fully complied and certified by latest EN 81 Standards and for public use in buildings of minimum features including but not limited to VVVF high efficiency motor, complete stainless steel finish,indoor type for ambient condition of 45 °C, capacity of 1000 Kg/13 persons, speed 1 m/sec, 04stops/04 openings, total travel height 16 m, entrance 900mm. Lift shall minimum includes car, hoisting machinery, counter-weight, supports, brackets, automatic controls, embedded parts, access ladder, separator screen & trap door, electric overload buzzer, shaft lightening, intercom system, gong, emergency operation for cabin/door, emergency rescue device (ups/battery) safety devices,Two (02) years of defect liability period with spare parts for two years complete in all respects as per specification and according to EN 81 standard compliance including civil works and electrical assessories. (Also Refer to Technical data sheet)	job	240000.00	3844800.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
31-18	Supply, Installation, testing and commissioning of imported brand new passenger/patient Elevator, Machine Room Less (MRL), heavy duty fully complied and certified by latest EN 81 Standards and for public use in buildings of minimum features including but not limited to VVVF high efficiency motor, complete stainless steel finish,indoor type for ambient condition of 45 °C, capacity of 1275 Kg/17 persons, speed 1 m/sec, 04stops/04 openings, total travel height 16 m, entrance 1100mm. Lift shall minimum includes car, hoisting machinery, counter-weight, supports, brackets, automatic controls, embedded parts, access ladder, separator screen & trap door, electric overload buzzer, shaft lightening, intercom system, gong, emergency operation for cabin/door, emergency rescue device (ups/battery) safety devices,Two (02) Years of defect liability period with spare parts for use of two years complete in all respects as per specification and according to EN 81 standard compliance including civil works and electrical assessories. (Also Refer to Technical data sheet)	job	240000.00	4444800.00	
31-19	Supply, Installation, testing and commissioning of imported brand new passenger/patient Elevator, Machine Room Less (MRL), heavy duty fully complied and certified by latest EN 81 Standards and for public use in buildings of minimum features including but not limited to VVVF high efficiency motor, complete stainless steel finish,indoor type for ambient condition of 45 °C, capacity of 1600 Kg/21 persons, speed 1 m/sec, 04stops/04 openings, total travel height 16 m, entrance 1300mm. Lift shall minimum includes car, hoisting machinery, counter-weight, supports, brackets, automatic controls, embedded parts, access ladder, separator screen & trap door, electric overload buzzer, shaft lightening, intercom system, gong, emergency operation for cabin/door, emergency rescue device (ups/battery) safety devices,Two (02) Years of defect liability period with spare parts for two years complete in all respects as per specification and according to EN 81 standard compliance compliance including civil works and electrical assessories. (Also Refer to Technical data sheet) including 17 % Sales Tax on Supply, 5% Custom Duty , 6% withholding tax & 2% other taxes	job	240000.00	4984800.00	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
31-20	Supply, Installation, testing and commissioning of imported brand new passenger/patient Elevator, Machine Room Less (MRL), heavy duty fully complied and certified by latest EN 81 Standards and for public use in buildings of minimum features including but not limited to VVVF high efficiency motor, complete stainless steel finish,indoor type for ambient condition of 45 °C, capacity of 2000 Kg/26 persons, speed 1 m/sec, 04stops/04 openings, total travel height 16 m, entrance 1300mm. Lift shall minimum includes car, hoisting machinery, counter-weight, supports, brackets, automatic controls, embedded parts, access ladder, separator screen & trap door, electric overload buzzer, shaft lightening, intercom system, gong, emergency operation for cabin/door, emergency rescue device (ups/battery) safety devices,Two (02) Years of defect liability period with spare parts for two years complete in all respects as per specification and according to EN 81 standard compliance compliance including civil works and electrical assessories. (Also Refer to Technical data sheet) including 17 % Sales Tax on Supply, 5% Custom Duty , 6% withholding tax & 2% other taxes	job	240000.00	5224800.00	
31-21	Supply, Installation, testing and providing Solar Geyser				
a)	Solar Geyser 150 Liter	Each	813.60	132813.60	
b)	Solar Geyser 200 Liter	Each	813.60	174813.60	
31-22	Supply and install DC Circuit Breaker				
a)	Single Pole Circuit Breaker 10 Ampere	Each	513.60	1773.60	
b)	Single Pole Circuit Breaker 16 Ampere	Each	513.60	1773.60	
c)	Single Pole Circuit Breaker 20 Ampere	Each	513.60	1773.60	
d)	Single Pole Circuit Breaker 25 Ampere	Each	513.60	1773.60	
e)	Single Pole Circuit Breaker 40 Ampere	Each	513.60	1899.60	
f)	Single Pole Circuit Breaker 50 Ampere	Each	513.60	1899.60	
g)	Single Pole Circuit Breaker 63 Ampere	Each	513.60	1899.60	
h)	2 Pole Circuit Breaker 10 Ampere	Each	513.60	1899.60	
i)	2 Pole Circuit Breaker 16 Ampere	Each	513.60	1899.60	
j)	2 Pole Circuit Breaker 20 Ampere	Each	513.60	1899.60	
k)	2 Pole Circuit Breaker 32 Ampere	Each	513.60	1899.60	
l)	2 Pole Circuit Breaker 40 Ampere	Each	513.60	1899.60	
m)	2 Pole Circuit Breaker 50 Ampere	Each	513.60	1899.60	
n)	2 Pole Circuit Breaker 63 Ampere	Each	513.60	1899.60	
o)	3 Pole Circuit Breaker 10 Ampere	Each	513.60	3663.60	
p)	3 Pole Circuit Breaker 16 Ampere	Each	513.60	3663.60	
q)	3 Pole Circuit Breaker 20 Ampere	Each	513.60	3663.60	
r)	3 Pole Circuit Breaker 32 Ampere	Each	513.60	3663.60	
s)	3 Pole Circuit Breaker 40 Ampere	Each	513.60	3663.60	
t)	3 Pole Circuit Breaker 50 Ampere	Each	513.60	3663.60	
u)	3 Pole Circuit Breaker 63 Ampere	Each	513.60	3663.60	
v)	4 Pole Circuit Breaker 10 Ampere	Each	513.60	4293.60	
w)	4 Pole Circuit Breaker 16 Ampere	Each	513.60	4293.60	
x)	4 Pole Circuit Breaker 20 Ampere	Each	513.60	4923.60	
y)	4 Pole Circuit Breaker 32 Ampere	Each	513.60	5301.60	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
z)	4 Pole Circuit Breaker 40 Ampere	Each	513.60	5805.60	
za)	4 Pole Circuit Breaker 50 Ampere	Each	513.60	5805.60	
zb)	4 Pole Circuit Breaker 63 Ampere	Each	513.60	5805.60	
zc)	4 Pole Circuit Breaker 70-100 Ampere (70KV)	Each	513.60	18153.60	
zd)	4 Pole Circuit Breaker 100-160 Ampere (70KV)	Each	513.60	20673.60	
ze)	4 Pole Circuit Breaker 160-250 Ampere (70KV)	Each	513.60	32013.60	
zf)	4 Pole Circuit Breaker 320-400 Ampere (70KV)	Each	513.60	60993.60	
zg)	4 Pole Circuit Breaker 500-630 Ampere (70KV)	Each	513.60	69813.60	
zh)	4 Pole Circuit Breaker 640-800 Ampere (70KV)	Each	513.60	82413.60	
zi)	4 Pole Circuit Breaker 800-1000 Ampere (70KV)	Each	513.60	95013.60	
31-23	Supply and install DC LED Bulb 5 Watt including accessories, installation materials. Philips type or approved equivalent	Each	513.60	645.60	
31-24	Supply and install DC LED Bulb 10 Watt including installation	Each	513.60	645.60	
31-25	Supply and install DC Fan 15-20 Watt including installation	Each	513.60	9513.60	
31-26	Supplying G.I. PVC Flexible pipe of approved make including the cost of specials.				
a)	25 mm diameter	Each	25.68	217.68	
31-27 a)	Provide, install, test and commission recessed wall mounting type distribution board fabricated from 16 SWG steel sheet, powder coated with approved color 2'x2'x1.5'	Each	1027.20	4051.20	
31-27 b)	Provide, install, of battery box fabricated from 16 SWG steel sheet, powder coated with approved color 1.5'x1.5'x1'	Each	1027.20	5437.20	
31-28	Solar Panel with aluminum frame Certified, Sealed Maintenance Free Solar Battery (free Li-ion), High efficiency automatic solar charge controller with programmable lighting ON and OFF time, auto operation from dusk to dawn(Built in), High efficiency Light Emitting Diode light with weather proof casing, Protection class IP65 with aluminum heat sink, Iron made, rust proof, adjustable mounting structure for Solar Panel with mounting arrangements on pole(one in Quantity), Steel Nails / Screws / Nut Bolts/ Cable Tie's/ Insulation tape /Connectors/ etc. excluding pole and civil works.				
a)	Solar Street Light 100 Watt		308.16	220178.16	
31-29	Providing and fixing at Site of Solar Submersible Pumpset including Motor of KSB, Komax, Alarko, Grandfos or approved equivalent (similar specifications), complete in all respects including all taxes.				
a)	Solar Submersible PumpSet, 4HP	Each	2654.40	84254.40	
b)	Solar Submersible PumpSet, 5HP	Each	2654.40	107054.40	
c)	Solar Submersible PumpSet, 7.5HP	Each	2654.40	164654.40	
d)	Solar Submersible PumpSet, 10HP	Each	5308.80	203308.80	
e)	Solar Submersible PumpSet, 12.5HP	Each	5308.80	251308.80	
f)	Solar Submersible PumpSet, 15HP	Each	5308.80	299308.80	
g)	Solar Submersible PumpSet, 17.5HP	Each	5308.80	317308.80	
h)	Solar Submersible PumpSet, 20HP	Each	5308.80	389308.80	
i)	Solar Submersible PumpSet, 25HP	Each	5308.80	497308.80	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
j)	Solar Submersible PumpSet, 30HP	Each	5308.80	593308.80	
k)	Solar Submersible PumpSet, 40HP	Each	5308.80	779308.80	
31-30	Providing and fixing at Site Solar Pump Controller (MPPT), complete in all respects including all taxes.				
a)	Solar Pump Controller (MPPT) for KSB, Alarko, Grandfos or approved equivalent pumps (similar specifications)	Each	5.14	19.54	
b)	Solar Pump Controller for Chinese Pumps	Each	5.14	19.54	
31-31	Providing and fixing at Site of Solar Submersible Pumpset including Motor of KSB,Komax, Alarko, Grandfos or approved equivalent (similar specifications), complete in all respects including all taxes.				
a)	Solar DC Submersible PumpSet, 0.5HP	Each	2654.40	20414.40	
b)	Solar DC Submersible PumpSet, 1HP	Each	2654.40	28454.40	
c)	Solar DC Submersible PumpSet, 2HP	Each	2654.40	48734.40	
d)	Solar DC Submersible PumpSet, 3HP	Each	2654.40	68174.40	
31-32	Providing and fixing at Site of Certified Solar Submersible Pumpset including Motor of Chinese Make, complete in all respects including all taxes.				
a)	Solar Submersible PumpSet, 4HP	Each	2654.40	84254.40	
b)	Solar Submersible PumpSet, 5HP	Each	2654.40	107054.40	
c)	Solar Submersible PumpSet, 7.5HP	Each	2654.40	164654.40	
d)	Solar Submersible PumpSet, 10HP	Each	5308.80	203308.80	
e)	Solar Submersible PumpSet, 12.5HP	Each	5308.80	251308.80	
f)	Solar Submersible PumpSet, 15HP	Each	5308.80	299308.80	
g)	Solar Submersible PumpSet, 17.5HP	Each	5308.80	317308.80	
h)	Solar Submersible PumpSet, 20HP	Each	5308.80	389308.80	
i	Solar Submersible PumpSet, 25HP	Each	5308.80	497308.80	
j)	Solar Submersible PumpSet, 30HP	Each	5308.80	593308.80	
k)	Solar Submersible PumpSet, 40HP	Each	5308.80	779308.80	
31-33	Providing and fixing at Site Surge Protector Complete in all respect including installation and testing and commissioning.				
a)	Surge Protector (40 KVA) 3 Pole	Each	1454.40	4394.40	
b)	Surge Protector (40 KVA) 4 Pole	Each	1454.40	5834.40	
31-34	Providing and fixing at Site Remote Online System Monitoring Device, Complete in all respect including installation and testing and commissioning.	Each	12326.40	108326.40	
31-35	Providing and fixing at Site System Control Panel (SCP), Complete in all respect including installation and testing and commissioning.	Each	8217.60	65817.60	
31-36	Supply, Install, connect, test and commission of BATTERIES- & accessories.				
a)	battery Maintanance free Lio ion (POU) 100AH	Each	513.60	114513.60	
b)	battery Maintanance free 12 V GEL Imported 1000AH	Each	513.60	94113.60	
c)	battery Maintanance free 12 V GEL Imported 600AH	Each	513.60	72513.60	
d)	battery Maintanance free 12 V AGM 1000AH	Each	513.60	480513.60	
e)	battery Maintanance free 12 V AGM 600AH	Each	513.60	240513.60	
f)	battery Maintanance free 12 V AGM/GEL 100AH	Each	513.60	48513.60	

Sr. No.	Description	Unit	Rate (Rs.)		Ref. Tech. Specs.
			Labour	Composite	
g)	battery Osaka 12 V 185AH	Each	513.60	52113.60	
h)	battery Phonix 12 V 230AH	Each	513.60	58113.60	
i	battery AGS 12 V 185AH	Each	513.60	50313.60	
j)	battery AGS 12 V 230AH	Each	513.60	55713.60	
k)	battery Lithium Narada 48 V 100AH	Each	513.60	258513.60	
l)	battery Osaka TA1600 Tabular plate deep cycle 12 V 150AH 9 plates	Each	513.60	44313.60	
m)	battery Osaka TA1800 Tabular plate deep cycle 12 V 185AH 5 plate	Each	513.60	52113.60	
n)	battery Osaka TA2500 Tabular plate deep cycle 12 V 230AH 9 plates	Each	513.60	45513.60	